YAMAHA

MU128

TONE GENERATOR

SOUND LIST & MIDI DATA

GENERAL MIDI

XG

TABLE OF CONTENTS

A/D Input Preset

BANK	Source		A/D1 / A/D2 PGM# = 1	2	3	4	5	6	7	8	9	10	11	12	13
0	MIC	Preset Name	Off	Mic	Reverb	Chorus	Chorus+Reverb	Karaoke1	Karaoke2	Karaoke3	Echo	Vocal	Studio	Oct Up	Oct Down
		input gain	mic	mic	mic	mic	mic	mic	mic	mic	mic	mic	mic	mic	mic
		var type	-	-	-	-	-	Karaoke1	Karaoke2	Karaoke3	Echo	Stage1	HM Enhancer	Pitch Change	Pitch Change
1	GUITAR (Note 1)	Preset Name	Off	Guitar	Reverb	Chorus	Chorus+Reverb	Tube	Stack	Flang Gtr	Clean Gtr	Funk Gtr	Tremolo	Phaser	5th Guitar
		input gain	mic	mic	mic	mic	mic	mic	mic	mic	mic	mic	mic	mic	mic
		var type	-	-	-	-	-	Amp Sim.	Amp Sim.	Flanger	Celeste	Touch Wah	Tremolo	Phaser	Pitch Change
2	KEYBOARD	Preset Name	Off	Keyboard	Reverb	Chorus	Chorus+Reverb	Phaser EP	Pan EP	Wah Clavi	Rotary Orgn	Synth Str	Synth Pad	Synth Lead	SFX
		input gain	line	line	line	line	line	line	line	line	line	line	line	line	line
		var type	-	-	-	-	-	Phaser	Auto Pan	Touch Wah	Rotary Speaker	Symphonic	Flanger2	Delay LCR	Pitch Change
3	AUDIO (Note 2)	Preset Name	Off	Audio	Reverb	Chorus	Chorus+Reverb								
		input gain	line	line	line	line	line								
		var type	-	-	-	-	-								
18	STEREO KEYBOARD (Note 3)	Preset Name	Off	Keyboard	Reverb	Chorus	Chorus+Reverb	Phaser EP	Pan EP	Wah Clavi	Rotary Orgn	Synth Str	Synth Pad	Synth Lead	SFX
		input gain	line	line	line	line	line	line	line	line	line	line	line	line	line
		var type	-	-	-	-	-	Phaser	Auto Pan	Touch Wah	Rotary Speaker	Symphonic	Flanger2	Delay LCR	Pitch Change
19	STEREO AUDIO (Note 3)	Preset Name	Off	Audio	Reverb	Chorus	Chorus+Reverb								
		input gain	line	line	line	line	line								
		var type	-	-	-	-	-								

(Note 1) Depending on the guitar, the input may be distorted. Adjust the A/D INPUT VOLUME or the volume of your guitar.

(Note 2) AUDIO sets PAN to Lch for A/D1 and Rch for A/D2.

(Note 3) The Stereo setting can be selected only for A/D1.
The A/D1 and A/D2 inputs will be handled as the Lch and Rch respectively of a stereo signal.
Thus, when you select Stereo, the bank number and program number of part A/D2 will be displayed as "***" and cannot be set.

EFFECT

Effect Type List

REVERB

No.	MSB	LSB	Effect Type	Remarks
0	00H	00H	NO EFFECT	Turn off the effect.
1	01H	00H	HALL 1	Reverb simulating the acoustics of a hall.
2	01H	01H	HALL 2	〃
3	02H	00H	ROOM 1	Reverb simulating the acoustics of a room.
4	02H	01H	ROOM 2	〃
5	02H	02H	ROOM 3	〃
6	03H	00H	STAGE 1	Reverb appropriate for a solo instrument.
7	03H	01H	STAGE 2	〃
8	04H	00H	PLATE	Reverb simulating a metal plate reverb device.
9	10H	00H	WHITE ROOM	Unique short reverb with a slight initial delay.
10	11H	00H	TUNNEL	Simulation of a cylindrical space extending to left and right.
11	12H	00H	CANYON	A hypothetical acoustic space which extends without limit.
12	13H	00H	BASEMENT	Reverb with distinctive resonance following a slight initial delay.

CHORUS

No.	MSB	LSB	Effect Type	Remarks
0	00H	00H	NO EFFECT	Turn off the effect.
1	41H	00H	CHORUS 1	A standard chorus effect, adding natural spaciousness to the sound.
2	41H	01H	CHORUS 2	〃
3	41H	02H	CHORUS 3	〃
4	41H	08H	CHORUS 4	〃
5	42H	00H	CELESTE 1	An effect which uses a 3-phase LFO to add modulation and spaciousness to the sound.
6	42H	01H	CELESTE 2	〃
7	42H	02H	CELESTE 3	〃
8	42H	08H	CELESTE 4	〃
9	43H	00H	FLANGER 1	An effect reminiscent of a jet airplane taking off and landing.
10	43H	01H	FLANGER 2	〃
11	43H	08H	FLANGER 3	〃
12	44H	00H	SYMPHONIC	A multi-stage version of CELESTE modulation.
13	57H	00H	ENSEMBLE DETUNE	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.
14	48H	00H	PHASER 1	Cyclically changes the phase to modulate the sound.

VARIATION

No.	MSB	LSB	Effect Type	Remarks
0	00H	00H	NO EFFECT	Turns off the effect.
1	01H	00H	HALL 1	Reverb simulating the acoustics of a hall.
2	01H	01H	HALL 2	〃
3	02H	00H	ROOM 1	Reverb simulating the acoustics of a room.
4	02H	01H	ROOM 2	〃
5	02H	02H	ROOM 3	〃
6	03H	00H	STAGE 1	Reverb appropriate for a solo instrument.
7	03H	01H	STAGE 2	〃
8	04H	00H	PLATE	Reverb simulating a metal plate reverb device.
9	10H	00H	WHITE ROOM	Distinctive short reverb with a slight initial delay.
10	11H	00H	TUNNEL	Simulation of a cylindrical space extending to left and right.
11	12H	00H	CANYON	A hypothetical acoustic space which extends without limit.
12	13H	00H	BASEMENT	Reverb with distinctive resonance following a slight initial delay.
13	05H	00H	DELAY L,C,R	Three delay sounds L, R and C (center).
14	06H	00H	DELAY L,R	Two delay sounds L and R, with two feedback delays.
15	07H	00H	ECHO	Two delays L and R, with independent feedback delay for L and R.
16	08H	00H	CROSS DELAY	This effect crosses the feedback of two delays.
17	09H	00H	ER 1	This effect isolates only the early reflection components of the reverb.
18	09H	01H	ER 2	〃
19	0AH	00H	GATE REVERB	Simulation of gated reverb.
20	0BH	00H	REVERSE GATE	Simulation of gated reverb played back in reverse.
21	14H	00H	KARAOKE 1	Echo for karaoke.
22	14H	01H	KARAOKE 2	〃
23	14H	02H	KARAOKE 3	〃
24	41H	00H	CHORUS 1	Conventional chorus effect which gives natural spaciousness to the sound.
25	41H	01H	CHORUS 2	〃
26	41H	02H	CHORUS 3	〃
27	41H	08H	CHORUS 4	〃
28	42H	00H	CELESTE 1	A three-phase LFO is used to give modulation and spaciousness to the sound.
29	42H	01H	CELESTE 2	〃
30	42H	02H	CELESTE 3	〃
31	42H	08H	CELESTE 4	〃
32	43H	00H	FLANGER 1	An effect reminiscent of a jet airplane taking off and landing.
33	43H	01H	FLANGER 2	〃
34	43H	08H	FLANGER 3	〃
35	44H	00H	SYMPHONIC	A multi-stage version of CELESTE modulation.
36	57H	00H	ENSEMBLE DETUNE	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.
37	58H	00H	AMBIENCE	An effect which adds spatial breadth by blurring the location of the sound.
38	45H	00H	ROTARY SPEAKER	Simulation of a rotary speaker. AC1 (assignable controller 1) etc. can be used to control the rotation speed.
39	56H	00H	2WAY ROTARY SPEAKER	Simulation of a rotary speaker. AC1 (assignable controller 1) etc. can be used to control the rotation speed.
40	46H	00H	TREMOLO	An effect which cyclically modulates the volume.
41	47H	00H	AUTO PAN	An effect which cyclically moves the sound between left/right and front/back.
42	48H	00H	PHASER 1	Cyclically changes the phase to modulate the sound.
43	48H	08H	PHASER 2	〃
44	49H	00H	DISTORTION	Adds distortion with an edge to the sound. Since a noise gate is included, this is suitable for use with A/D input as well.
45	49H	01H	COMP+DISTORTION	Since a compressor is included in the first stage, distortion can be applied evenly, regardless of the input level.
46	4AH	00H	OVER DRIVE	Adds mild distortion to the sound. Since a noise gate is included, this is suitable for A/D input as well.
47	4BH	00H	AMP SIMULATOR	Simulation of a guitar amp. Since a noise gate is included, this is suitable for use with A/D input as well.
48	4CH	00H	3BAND EQ(MONO)	Mono EQ with equalization of LOW, MID and HIGH.
49	4DH	00H	2BAND EQ(STEREO)	Stereo EQ with equalization of LOW and HIGH. Ideal for Drum Parts.
50	4EH	00H	AUTO WAH(LFO)	Cyclically changes the center frequency of a wah filter. Can also be used with AC1 etc. as a pedal wah.
51	4EH	01H	AUTO WAH+DIST	Applies DISTORTION to the output of AUTO WAH to distort the sound. Can also be used with AC1 etc. as a pedal wah.
52	4EH	02H	AUTO WAH+ODRV	Applies OVERDRIVE to the output of AUTO WAH to distort the sound. Can also be used with AC1 etc. as a pedal wah.
53	52H	00H	TOUCH WAH 1	Changes the center frequency of a wah filter according to the input level. Can also be used with AC1 etc. as a pedal way.
54	52H	01H	TOUCH WAH 2	Applies DISTORTION to the output of TOUCH WAH to distort the sound. Can also be used with AC1 etc. as a pedal wah.
55	52H	02H	TOUCH WAH+DIST	Applies OVERDRIVE to the output of TOUCH WAH to distort the sound. Can also be used with AC1 etc. as a pedal wah.
56	52H	08H	TOUCH WAH+ODRV	Changes the center frequency of a wah filter according to the input level. Can also be used with AC1 etc. as a pedal wah.
57	50H	00H	PITCH CHANGE 1	This effect changes the pitch of the input signal.
58	50H	01H	PITCH CHANGE 2	〃
59	51H	00H	HARMONIC ENHANCER*	This effect adds new overtones to the input signal to make the sound stand out.
60	53H	00H	COMPRESSOR	Holds down the output when the input exceeds a specified level. Can also be used to add a sense of attack to the sound.
61	54H	00H	NOISE GATE	Gates the input when the input signal falls below a specified level. Useful for cutting noise from the A/D input, etc.
62	55H	00H	VOICE CANCEL	Attenuates the vocal part from sources such as CDs.
63	5DH	00H	TALKING MODULATOR	Adds a vowel sound to the input signal.
64	5EH	00H	LO-FI	Degrades the audio quality of the input signal.
65	5FH	00H	DIST+DELAY	DISTORTION and DELAY are connected in series.
66	5FH	01H	OVERDRIVE+DELAY	OVERDRIVE and DELAY are connected in series.
67	60H	00H	COMP+DIST+DELAY	COMPRESSOR, DISTORTION and DELAY are connected in series.
68	60H	01H	COMP+OVERDRIVE+DELAY	COMPRESSOR, OVERDRIVE and DELAY are connected in series.
69	61H	00H	WAH+DIST+DELAY	TOUCH WAH, DISTORTION and DELAY are connected in series.
70	61H	01H	WAH+OVERDRIVE+DELAY	TOUCH WAH, OVERDRIVE and DELAY are connected in series.
71	40H	00H	THRU	Bypass without applying an effect.

* The Harmonic Enhancer produces the same effect as its MU series predecessor.

INSERTION1,2

No.	MSB	LSB	Effect Type	Remarks
0	40H	00H	THRU	Bypass without applying an effect.
1	01H	00H	HALL 1	Reverb simulating the acoustics of a hall.
2	01H	01H	HALL 2	〃
3	02H	00H	ROOM 1	Reverb simulating the acoustics of a room.
4	02H	01H	ROOM 2	〃
5	02H	02H	ROOM 3	〃
6	03H	00H	STAGE 1	Reverb appropriate for a solo instrument.
7	03H	01H	STAGE 2	〃
8	04H	00H	PLATE	Reverb simulating a metal plate reverb device.
9	05H	00H	DELAY L,C,R	Three delay sounds L, R and C (center).
10	06H	00H	DELAY L,R	Two delay sounds L and R, with two feedback delays.
11	07H	00H	ECHO	Two delays L and R, with independent feedback delay for L and R.
12	08H	00H	CROSS DELAY	This effect crosses the feedback of two delays.
13	14H	00H	KARAOKE 1	Echo for karaoke.
14	14H	01H	KARAOKE 2	〃
15	14H	02H	KARAOKE 3	〃
16	41H	00H	CHORUS 1	Conventional chorus effect which gives natural spaciousness to the sound.
17	41H	01H	CHORUS 2	〃
18	41H	02H	CHORUS 3	〃
19	41H	08H	CHORUS 4	〃
20	42H	00H	CELESTE 1	A three-phase LFO is used to give modulation and spaciousness to the sound.
21	42H	01H	CELESTE 2	〃
22	42H	02H	CELESTE 3	〃
23	42H	08H	CELESTE 4	〃
24	43H	00H	FLANGER 1	An effect reminiscent of a jet airplane taking off and landing.
25	43H	01H	FLANGER 2	〃
26	43H	08H	FLANGER 3	〃
27	44H	00H	SYMPHONIC	A multi-stage version of CELESTE modulation.
28	57H	00H	ENSEMBLE DETUNE	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.
29	45H	00H	ROTARY SPEAKER	Simulation of a rotary speaker. AC1 (assignable controller 1) etc. can be used to control the rotation speed.
30	46H	00H	TREMOLO	An effect which cyclically modulates the volume.
31	47H	00H	AUTO PAN	An effect which cyclically moves the sound between left/right and front/back.
32	48H	00H	PHASER 1	Cyclically changes the phase to modulate the sound.
33	49H	00H	DISTORTION	Adds distortion with an edge to the sound.
34	4AH	00H	OVER DRIVE	Adds mild distortion to the sound.
35	4BH	00H	AMP SIMULATOR	Simulation of a guitar amp.
36	4CH	00H	3BAND EQ(MONO)	Mono EQ with equalization of LOW, MID and HIGH.
37	4DH	00H	2BAND EQ(STEREO)	Stereo EQ with equalization of LOW and HIGH. Ideal for Drum Parts.
38	4EH	00H	AUTO WAH(LFO)	Cyclically changes the center frequency of a wah filter. Can also be used with AC1 etc. as a pedal wah.
39	52H	00H	TOUCH WAH 1	Changes the center frequency of a wah filter according to the input level. Can also be used with AC1 etc. as a pedal wah.
40	52H	08H	TOUCH WAH 2	Changes the center frequency of a wah filter according to the input level. Can also be used with AC1 etc. as a pedal wah.
41	51H	00H	HARMONIC ENHANCER*	This effect adds new overtones to the input signal to make the sound stand out.
42	53H	00H	COMPRESSOR	Holds down the output when the input exceeds a specified level. Can also be used to add a sense of attack to the sound.
43	54H	00H	NOISE GATE	Gates the input when the input signal falls below a specified level. Useful for cutting noise from the A/D input, etc.

* The Harmonic Enhancer produces the same effect as its MU series predecessor.

Effect LSB/MSB List

REVERB TYPE

TYPE MSB		TYPE LSB				
DEC	HEX	00	01	02	...	08
000	0	NO EFFECT				
001	1	HALL 1	HALL 2			
002	2	ROOM 1	ROOM 2	ROOM 3		
003	3	STAGE 1	STAGE 2			
004	4	PLATE				
005	5	NO EFFECT				
:	:	:				
015	F	NO EFFECT				
016	10	WHITE ROOM				
017	11	TUNNEL				
018	12	CANYON				
019	13	BASEMENT				
020	14	NO EFFECT				
:	:	:				
127	7F	NO EFFECT				

(light grey) NO EFFECT (dark grey) Same as basic effects (LSB=00)

CHORUS TYPE

TYPE MSB		TYPE LSB				
DEC	HEX	00	01	02	...	08
000	0	NO EFFECT				
001	1	NO EFFECT				
:	:	:				
064	40	NO EFFECT				
065	41	CHORUS 1	CHORUS 2	CHORUS 3		CHORUS 4
066	42	CELESTE 1	CELESTE 2	CELESTE 3		CELESTE 4
067	43	FLANGER 1	FLANGER 2			FLANGER 3
068	44	SYMPHONIC				
069	45	NO EFFECT				
:	:	:				
071	47	NO EFFECT				
072	48	PHASER 1				
073	49	NO EFFECT				
:	:	:				
086	56	NO EFFECT				
087	57	ENSEMBLE DETUNE				
088	58	NO EFFECT				
:	:	:				
127	7F	NO EFFECT				

(light grey) NO EFFECT (dark grey) Same as basic effects (LSB=00)

VARIATION TYPE (MSB=0 - 63)

TYPE MSB		TYPE LSB				
DEC	HEX	00	01	02	...	08
000	0	NO EFFECT				
001	1	HALL 1	HALL 2			
002	2	ROOM 1	ROOM 2	ROOM 3		
003	3	STAGE 1	STAGE 2			
004	4	PLATE				
005	5	DELAY L,C,R				
006	6	DELAY L,R				
007	7	ECHO				
008	8	CROSS DELAY				
009	9	ER 1	ER 2			
010	A	GATE REVERB				
011	B	REVERSE GATE				
012	C	NO EFFECT or THRU				
:	:	:				
015	F	NO EFFECT or THRU				
016	10	WHITE ROOM				
017	11	TUNNEL				
018	12	CANYON				
019	13	BASEMENT				
020	14	KARAOKE 1	KARAOKE 2	KARAOKE 3		
021	15	NO EFFECT or THRU				
:	:	:				
063	3F	NO EFFECT or THRU				

NO EFFECT (for SYS) or THRU (for INS) — Same as basic effects (LSB=00)

VARIATION TYPE (MSB=64 - 127)

TYPE MSB		TYPE LSB				
DEC	HEX	00	01	02	...	08
064	40	THRU				
065	41	CHORUS 1	CHORUS 2	CHORUS 3		CHORUS 4
066	42	CELESTE 1	CELESTE 2	CELESTE 3		CELESTE 4
067	43	FLANGER 1	FLANGER 2			FLANGER 3
068	44	SYMPHONIC				
069	45	ROTARY SPEAKER				
070	46	TREMOLO				
071	47	AUTO PAN				
072	48	PHASER 1				PHASER 2
073	49	DISTORTION	COMP+DISTORTION			
074	4A	OVER DRIVE				
075	4B	AMP SIMULATOR				
076	4C	3-BAND EQ				
077	4D	2-BAND EQ				
078	4E	AUTO WAH(LFO)	AUTO WAH+DIST	AUTO WAH+OVERDRIVE		
079	4F	THRU				
080	50	PITCH CHANGE1	PITCH CHANGE2			
081	51	HARMONIC ENHANCER*				
082	52	TOUCH WAH 1	TOUCH WAH+DIST	TOUCH WAH+OVERDRIVE		TOUCH WAH 2
083	53	COMPRESSOR				
084	54	NOISE GATE				
085	55	VOICE CANCEL				
086	56	2WAY ROTARY SPEAKER				
087	57	ENSEMBLE DETUNE				
088	58	AMBIENCE				
089	59	THRU				
:	:	:				
092	5C	THRU				
093	5D	TALKING MODULATOR				
094	5E	LO-FI				
095	5F	DIST+DELAY	OVERDRIVE+DELAY			
096	60	COMP+DIST+DELAY	COMP+OVERDRIVE+DELAY			
097	61	WAH+DIST+DELAY	WAH+OVERDRIVE+DELAY			
098	62	THRU				
:	:	:				
127	7F	THRU				

* The Harmonic Enhancer produces the same effect as its MU series predecessor.

THRU — Same as basic effects (LSB=00)

INSERTION TYPE

TYPE MSB		TYPE LSB				
DEC	HEX	00	01	02	...	08
000	0	THRU				
001	1	HALL 1	HALL 2			
002	2	ROOM 1	ROOM 2	ROOM 3		
003	3	STAGE 1	STAGE 2			
004	4	PLATE				
005	5	DELAY L,C,R				
006	6	DELAY L,R				
007	7	ECHO				
008	8	CROSS DELAY				
009	9	THRU				
:	:	:				
019	13	THRU				
020	14	KARAOKE 1	KARAOKE 2	KARAOKE 3		
021	15	THRU				
:	:	:				
063	3F	THRU				
064	40	THRU				
065	41	CHORUS 1	CHORUS 2	CHORUS 3		CHORUS 4
066	42	CELESTE 1	CELESTE 2	CELESTE 3		CELESTE 4
067	43	FLANGER 1	FLANGER 2			
		FLANGER 3				
068	44	SYMPHONIC				
069	45	ROTARY SPEAKER				
070	46	TREMOLO				
071	47	AUTO PAN				
072	48	PHASER 1				
073	49	DISTORTION				
074	4A	OVER DRIVE				
075	4B	AMP SIMULATOR				
076	4C	3BAND EQ				
077	4D	2-BAND EQ				
078	4E	AUTO WAH(LFO)				
079	4F	THRU				
080	50	THRU				
081	51	HARMONIC ENHANCER*				
082	52	TOUCH WAH 1				TOUCH WAH 2
083	53	COMPRESSOR				
084	54	NOISE GATE				
085	55	THRU				
086	56	THRU				
087	57	ENSEMBLE DETUNE				
088	58	THRU				
:	:	:				

* The Harmonic Enhancer produces the same effect as its MU series predecessor. [light grey] THRU [dark grey] Same as basic effects (LSB=00)

Effect Parameter List

Note

- *Parameters marked with a ● in the "Control" column can be controlled from an AC1 (assignable controller 1) etc. However, this is valid only for a Variation effect (when selected for Insertion) and for Insertion effects 1/2.*
- *Dry/Wet is valid only for a Variation effect (when selected for Insertion) and for Insertion effects 1/2.*
- *Abbreviations used in the effect block diagrams*
  - *LPF = Low Pass Filter*
  - *HPF = High Pass Filter*
  - *LSF = Low Shelving Filter*
  - *HSF = High Shelving Filter*
  - *PDF = Peak Dip Filter*
  - *EF = Envelope Follower*
  - *ER = Early Reflection*

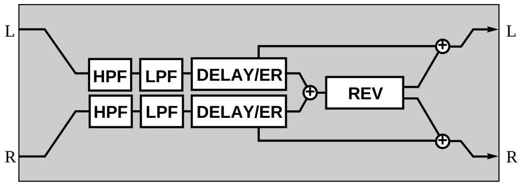
● HALL1, 2
ROOM1, 2, 3
STAGE1, 2
PLATE (Reverb, Variation, Insertion1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	Reverb Time	0.3 – 30.0s	0-69	table#4	
2	Diffusion	0 – 10	0-10		
3	Initial Delay	0 – 63	0-63	table#5	
4	HPF Cutoff	Thru – 8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k – Thru	34-60	table#3	
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Rev Delay	0 – 63	0-63	table#5	
12	Density	0 – 4 (reverb, variation block)	0-4		
		0 – 2 (insertion1,2 block)	0-2		
13	Er/Rev Balance	E63>R – E=R – E<R63	1-127		
14	High Damp	0.1 – 1.0	1-10		
15	Feedback Level	-63 – +63	1-127		
16					

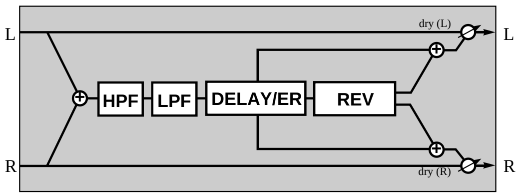
WHITE ROOM
TUNNEL
CANYON
BASEMENT (Reverb, Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Reverb Time	0.3 – 30.0s	0-69	table#4	
2	Diffusion	0 – 10	0-10		
3	Initial Delay	0 – 63	0-63	table#5	
4	HPF Cutoff	Thru – 8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k – Thru	34-60	table#3	
6	Width	0.5 – 10.2m	0-37	table#11	
7	Heigt	0.5 – 20.2m	0-73	table#11	
8	Depth	0.5 – 30.2m	0-104	table#11	
9	Wall Vary	0 – 30	0-30		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Rev Delay	0 – 63	0-63	table#5	
12	Density	0 – 4	0-4		
13	Er/Rev Balance	E63>R – E=R – E<R63	1-127		
14	High Damp	0.1 – 1.0	1-10		
15	Feedback Level	-63 – +63	1-127		
16					

Reverb Block

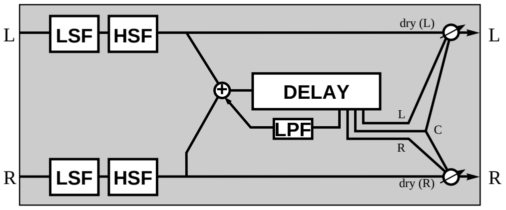


Variation, Insertion Block



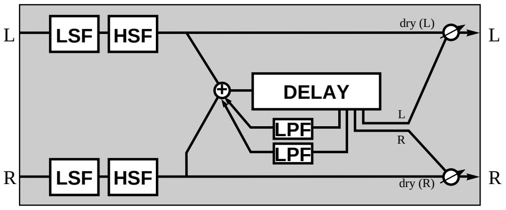
● DELAY L, C, R (Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay	0.1 – 1486.0ms (variation block)	1-14860		
		0.1 – 742.9ms (insertion1,2 block)	1-7429		
2	Rch Delay	0.1 – 1486.0ms (variation block)	1-14860		
		0.1 – 742.9ms (insertion1,2 block)	1-7429		
3	Cch Delay	0.1 – 1486.0ms (variation block)	1-14860		
		0.1 – 742.9ms (insertion1,2 block)	1-7429		
4	Feedback Delay	0.1 – 1486.0ms (variation block)	1-14860		
		0.1 – 742.9ms (insertion1,2 block)	1-7429		
5	Feedback Level	-63 – +63	1-127		
6	Cch Level	0 – 127	0-127		
7	High Damp	0.1 – 1.0	1-10		
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
14	EQ Low Gain	-12 – +12dB	52-76		
15	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
16	EQ High Gain	-12 – +12dB	52-76		



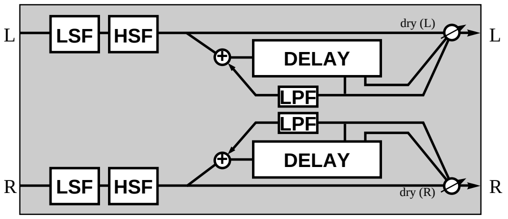
● DELAY L, R (Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay	0.1 – 1486.0ms (variation block)	1-14860		
		0.1 – 742.9ms (insertion1,2 block)	1-7429		
2	Rch Delay	0.1 – 1486.0ms (variation block)	1-14860		
		0.1 – 742.9ms (insertion1,2 block)	1-7429		
3	Feedback Delay 1	0.1 – 1486.0ms (variation block)	1-14860		
		0.1 – 742.9ms (insertion1,2 block)	1-7429		
4	Feedback Delay 2	0.1 – 1486.0ms (variation block)	1-14860		
		0.1 – 742.9ms (insertion1,2 block)	1-7429		
5	Feedback Level	-63 – +63	1-127		
6	High Damp	0.1 – 1.0	1-10		
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
14	EQ Low Gain	-12 – +12dB	52-76		
15	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
16	EQ High Gain	-12 – +12dB	52-76		



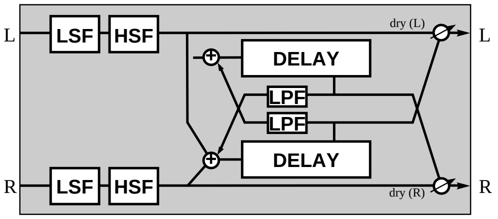
● ECHO (Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay1	0.1 – 743.0ms (variation block)	1-7430		
		0.1 – 371.4ms (insertion1,2 block)	1-3714		
2	Lch Feedback Level	-63 – +63	1-127		
3	Rch Delay1	0.1 – 743.0ms (variation block)	1-7430		
		0.1 – 371.4ms (insertion1,2 block)	1-3714		
4	Rch Feedback Level	-63 – +63	1-127		
5	High Damp	0.1 – 1.0	1-10		
6	Lch Delay2	0.1 – 743.0ms (variation block)	1-7430		
		0.1 – 371.4ms (insertion1,2 block)	1-3714		
7	Rch Delay2	0.1 – 743.0ms (variation block)	1-7430		
		0.1 – 371.4ms (insertion1,2 block)	1-3714		
8	Delay2 Level	0 – 127	0-127		
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
14	EQ Low Gain	-12 – +12dB	52-76		
15	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
16	EQ High Gain	-12 – +12dB	52-76		



● CROSS DELAY (Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	L->R Delay	0.1 – 743.0ms (variation block)	1-7430		
		0.1 – 371.4ms (insertion1,2 block)	1-3714		
2	R->L Delay	0.1 – 743.0ms (variation block)	1-7430		
		0.1 – 371.4ms (insertion1,2 block)	1-3714		
3	Feedback Level	-63 – +63	1-127		
4	Input Select	L,R,L&R	0-2		
5	High Damp	0.1 – 1.0	1-10		
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
14	EQ Low Gain	-12 – +12dB	52-76		
15	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
16	EQ High Gain	-12 – +12dB	52-76		

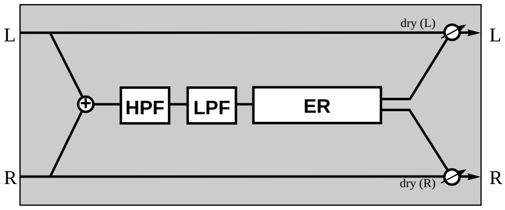


● EARLY REF 1, 2 (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Type	S-H, L-H, Rdm, Rvs, Plt, Spr	0-5		
2	Room Size	0.1 – 7.0	0-44	table#6	
3	Diffusion	0 – 10	0-10		
4	Initial Delay	0 – 63	0-63	table#5	
5	Feedback Level	-63 – +63	1-127		
6	HPF Cutoff	Thru – 8.0kHz	0-52	table#3	
7	LPF Cutoff	1.0k – Thru	34-60	table#3	
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Liveness	0 – 10	0-10		
12	Density	0 – 3	0-3		
13	High Damp	0.1 – 1.0	1-10		
14					
15					
16					

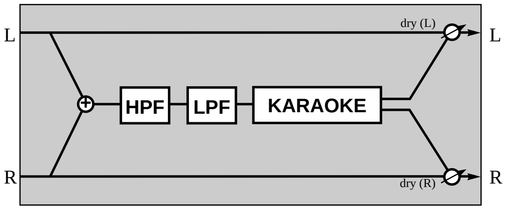
GATE REVERB
REVERSE GATE (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Type	TypeA,TypeB	0-1		
2	Room Size	0.1 – 20.0	0-127	table#6	
3	Diffusion	0 – 10	0-10		
4	Initial Delay	0 – 127	0-127	table#5	
5	Feedback Level	-63 – +63	1-127		
6	HPF Cutoff	Thru – 8.0kHz	0-52	table#3	
7	LPF Cutoff	1.0k – Thru	34-60	table#3	
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Liveness	0 – 10	0-10		
12	Density	0 – 3	0-3		
13	High Damp	0.1 – 1.0	1-10		
14					
15					
16					



● KARAOKE1, 2, 3 (Variation, Insertion 1, 2 block)

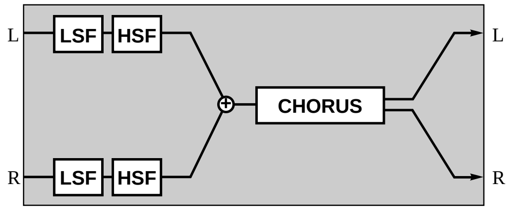
No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0 – 127	0-127	table#7	
2	Feedback Level	-63 – +63	1-127		
3	HPF Cutoff	Thru – 8.0kHz	0-52	table#3	
4	LPF Cutoff	1.0k – Thru	34-60	table#3	
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11					
12					
13					
14					
15					
16					



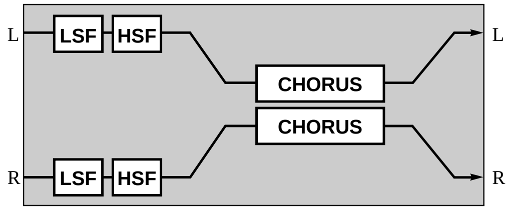
● CHORUS 1, 2, 3, 4
CELESTE 1, 2, 3, 4 (Chorus, Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	
2	LFO Depth	0 – 127	0-127		
3	Feedback Level	-63 – +63	1-127		
4	Delay Offset	0 – 127	0-127	table#2	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	EQ Mid Frequency	100Hz – 10.0kHz (variation block)	14-54	table#3	
12	EQ Mid Gain	-12 – +12dB (variation block)	52-76		
13	EQ Mid Width	1.0 – 12.0 (variation block)	10-120		
14					
15	Input Mode	mono/stereo	0-1		
16					

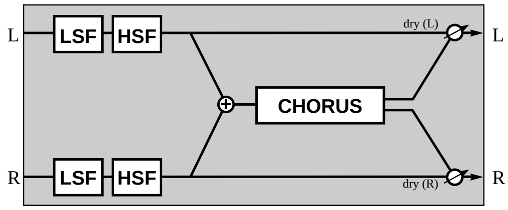
Chorus Block: when input mode = "mono"



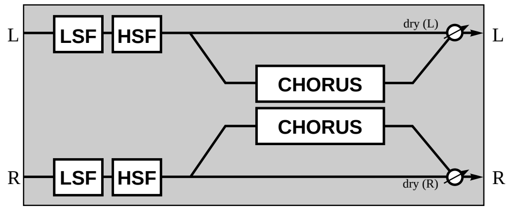
Chorus Block: when input mode = "stereo"



Variation, Insertion Block: when input mode = "mono"



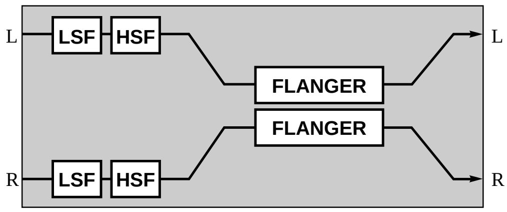
Variation, Insertion Block: when input mode = "stereo"



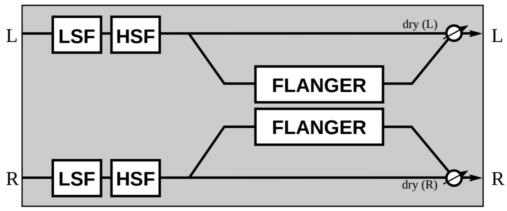
● FLANGER 1, 2, 3
(Chorus, Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	
2	LFO Depth	0 – 127	0-127		
3	Feedback Level	-63 – +63	1-127		
4	Delay Offset	0 – 63	0-63	table#2	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	EQ Mid Frequency	100Hz – 10.0kHz (variation block)	14-54	table#3	
12	EQ Mid Gain	-12 – +12dB (variation block)	52-76		
13	EQ Mid Width	1.0 – 12.0 (variation block)	10-120		
14	LFO Phase Difference	-180 – +180deg	4-124	resolution=3deg.	
15					
16					

Chorus Block



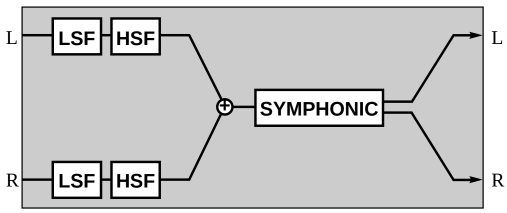
Variation, Insertion Block



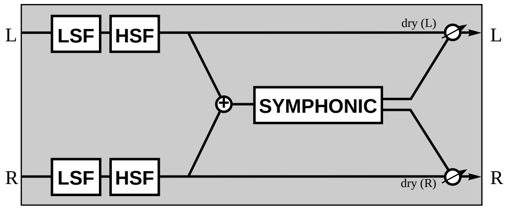
● SYMPHONIC
(Chorus, Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	
2	LFO Depth	0 – 127	0-127		
3	Delay Offset	0 – 127	0-127	table#2	
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	EQ Mid Frequency	100Hz – 10.0kHz (variation block)	14-54	table#3	
12	EQ Mid Gain	-12 – +12dB (variation block)	52-76		
13	EQ Mid Width	1.0 – 12.0 (variation block)	10-120		
14					
15					
16					

Chorus Block



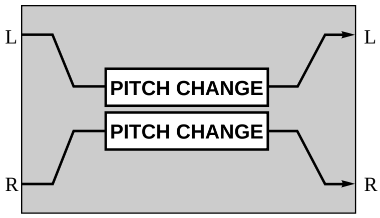
Variation, Insertion Block



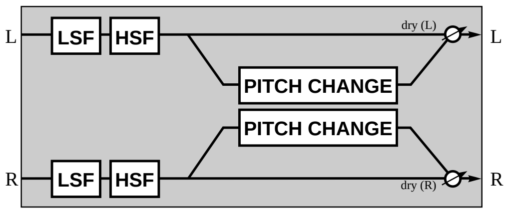
● ENSEMBLE DETUNE
(Chorus, Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	Detune	-50 – +50cent	14-114		
2	Lch Init Delay	0 – 127	0-127	table#2	
3	Rch Init Delay	0 – 127	0-127	table#2	
4					
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	EQ Low Frequency	32Hz – 2.0kHz (variation, insertion1,2 block)	4-40	table#3	
12	EQ Low Gain	-12 – +12dB (variation, insertion1,2 block)	52-76		
13	EQ High Frequency	500Hz – 16.0kHz (variation, insertion1,2 block)	28-58	table#3	
14	EQ High Gain	-12 – +12dB (variation, insertion1,2 block)	52-76		
15					
16					

Chorus Block

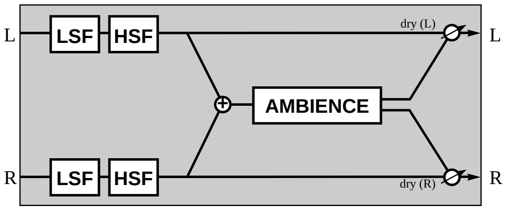


Variation, Insertion Block



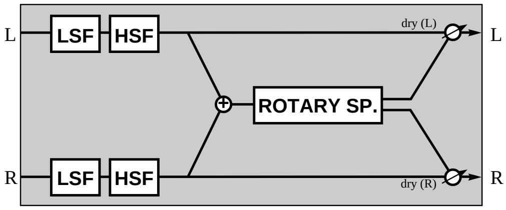
● AMBIENCE (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0 – 127	0-127	table#2	
2	Output Phase	normal/invers	0-1		
3					
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11					
12					
13					
14					
15					
16					



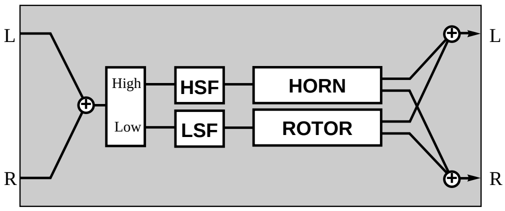
● ROTARY SPEAKER (Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	●
2	LFO Depth	0 – 127	0-127		
3					
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		
11	EQ Mid Frequency	100Hz – 10.0kHz (variation block)	14-54	table#3	
12	EQ Mid Gain	-12 – +12dB (variation block)	52-76		
13	EQ Mid Width	1.0 – 12.0 (variation block)	10-120		
14					
15					
16					



● 2WAY ROTARY SPEAKER (Variation block)

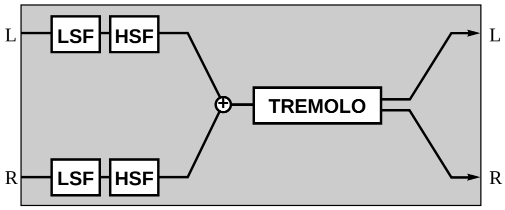
No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0Hz – 39.7Hz	0-127	table#1	●
2	Drive Low	0 – 127	0-127		
3	Drive High	0 – 127	0-127		
4	Low/High	L63>H – L=H – L<H63	1-127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10					
11	Crossover Frequency	100Hz – 10.0kHz	14-54	table#3	
12	Mic L-R Angle	0deg – 180deg	0-60	resolution=3deg.	
13					
14					
15					
16					



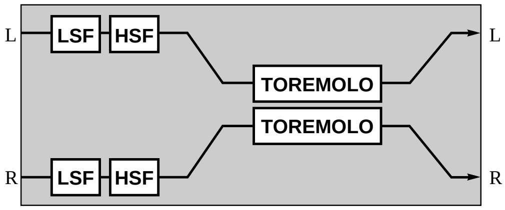
● TREMOLO (Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	●
2	AM Depth	0 – 127	0-127		
3	PM Depth	0 – 127	0-127		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10					
11	EQ Mid Frequency	100Hz – 10.0kHz (variation block)	14-54	table#3	
12	EQ Mid Gain	-12 – +12dB (variation block)	52-76		
13	EQ Mid Width	1.0 – 12.0 (variation block)	10-120		
14	LFO Phase Difference	-180 – +180deg	4-124	resolution=3deg.	
15	Input Mode	mono/stereo	0-1		
16					

When input mode="mono"

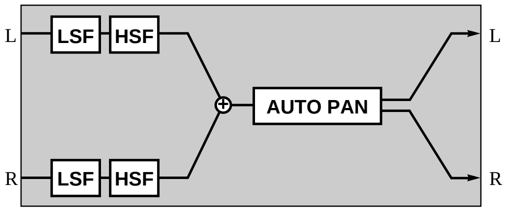


When input mode="stereo"



● AUTO PAN (Variation, Insertion 1, 2 block)

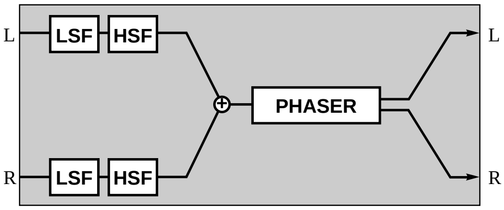
No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	●
2	L/R Depth	0 – 127	0-127		
3	F/R Depth	0 – 127	0-127		
4	PAN Direction	L<->R,L->R,L<-R,Lturn,Rturn,L/R	0-5		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10					
11	EQ Mid Frequency	100Hz – 10.0kHz (variation block)	14-54	table#3	
12	EQ Mid Gain	-12 – +12dB (variation block)	52-76		
13	EQ Mid Width	1.0 – 12.0 (variation block)	10-120		
14					
15					
16					



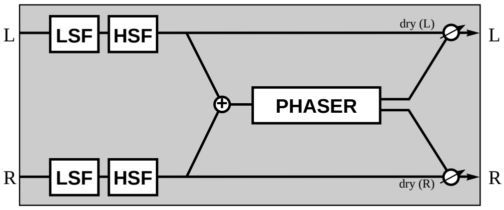
● PHASER 1
(Chorus, Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	
2	LFO Depth	0 – 127	0-127		
3	Phase Shift Offset	0 – 127	0-127		
4	Feedback Level	-63 – +63	1-127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Stage	4,5,6 (chorus, insertion1,2 block)	4-6		
		4 – 12 (variation block)	4-12		
12	Diffusion	mono/stereo	0-1		
13					
14					
15					
16					

Chorus Block

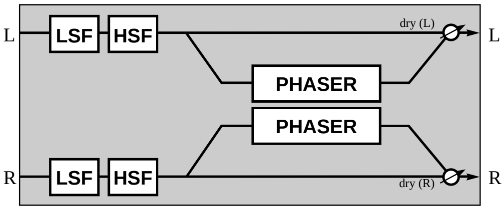


Variation, Insertion Block



● PHASER 2 (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	
2	LFO Depth	0 – 127	0-127		
3	Phase Shift Offset	0 – 127	0-127		
4	Feedback Level	-63 – +63	1-127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Stage	3,4,5,6	3-6		
12					
13	LFO Phase Difference	-180deg – +180deg	4-124	resolution=3deg.	
14					
15					
16					



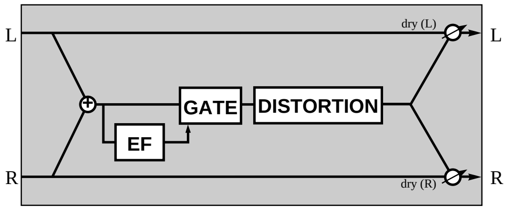
● DISTORTION
OVERDRIVE (Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	Drive	0 – 127	0-127		●
2	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
3	EQ Low Gain	-12 – +12dB	52-76		
4	LPF Cutoff	1.0k – Thru	34-60	table#3	
5	Output Level	0 – 127	0-127		
6					
7	EQ Mid Frequency	100Hz – 10.0kHz	14-54	table#3	
8	EQ Mid Gain	-12 – +12dB	52-76		
9	EQ Mid Width	1.0 – 12.0	10-120		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		
11	Edge(Clip Curve)	0 – 127	0-127	mild to sharp	
12					
13					
14					
15					
16					

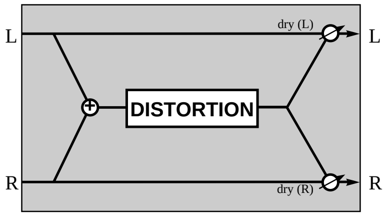
AMP SIMULATOR
(Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	Drive	0 – 127	0-127		●
2	AMP Type	Off,Stack,Combo,Tube	0-3		
3	LPF Cutoff	1.0k – Thru	34-60	table#3	
4	Output Level	0 – 127	0-127		
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		
11	Edge(Clip Curve)	0 – 127	0-127	mild to sharp	
12					
13					
14					
15					
16					

Variation Block

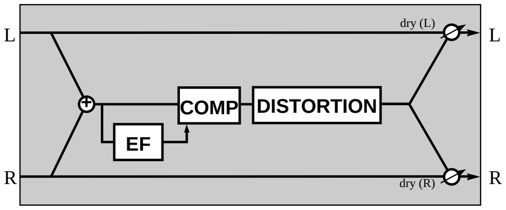


Insertion Block



● COMP+DIST (Variation block)

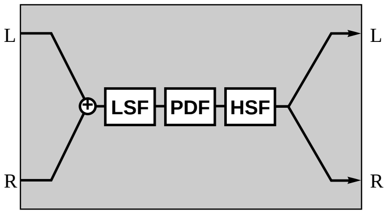
No.	Parameter	Display	Value	See Table	Control
1	Drive	0 – 127	0-127		●
2	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
3	EQ Low Gain	-12 – +12dB	52-76		
4	LPF Cutoff	1.0k – Thru	34-60	table#3	
5	Output Level	0 – 127	0-127		
6					
7	EQ Mid Frequency	100Hz – 10.0kHz	14-54	table#3	
8	EQ Mid Gain	-12 – +12dB	52-76		
9	EQ Mid Width	1.0 – 12.0	10-120		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		
11	Edge(Clip Curve)	0 – 127	0-127	mild to sharp	
12	Attack	1ms – 40ms	0-19	table#8	
13	Release	10ms – 680ms	0-15	table#9	
14	Threshold	-48dB – -6dB	79-121		
15	Ratio	1.0 – 20.0	0-7	table#10	
16					



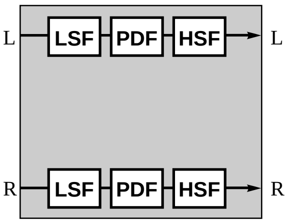
● 3BAND EQ (MONO)
(Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	EQ Low Gain	-12 – +12dB	52-76		
2	EQ Mid Frequency	100Hz – 10.0kHz	14-54	table#3	
3	EQ Mid Gain	-12 – +12dB	52-76		
4	EQ Mid Width	1.0 – 12.0	10-120		
5	EQ High Gain	-12 – +12dB	52-76		
6	EQ Low Frequency	50Hz – 2.0kHz	8-40	table#3	
7	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
8					
9					
10					
11					
12					
13					
14					
15	Input Mode	mono/stereo	0-1		
16					

When input mode="mono"

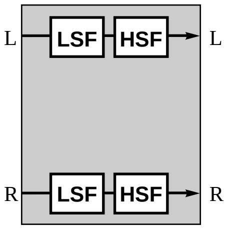


When input mode="stereo"



● 2BAND EQ (STEREO)
(Variation, Insertion 1, 2 block)

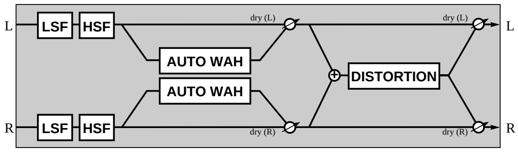
No.	Parameter	Display	Value	See Table	Control
1	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
2	EQ Low Gain	-12 – +12dB	52-76		
3	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
4	EQ High Gain	-12 – +12dB	52-76		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					



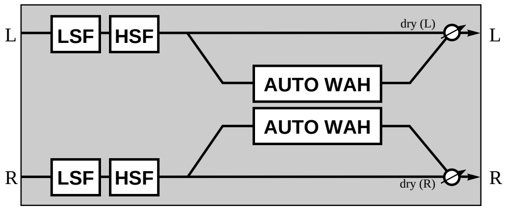
● AUTO WAH (Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	
2	LFO Depth	0 – 127	0-127		
3	Cutoff Frequency Offset	0 – 127	0-127		●
4	Resonance	1.0 – 12.0	10-120		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		
11	Drive (Variation block)	0 – 127	0-127		
12					
13					
14					
15					
16					

Variation Block

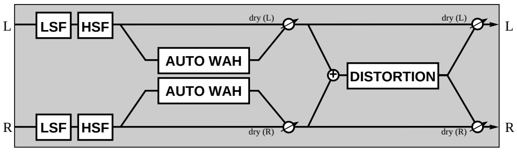


Insertion Block



● AUTO WAH+DIST
AUTO WAH+ODRV (Variation block)

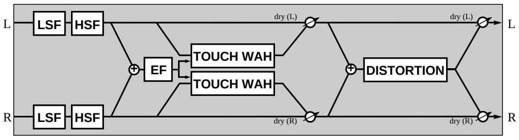
No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0-127	table#1	
2	LFO Depth	0 – 127	0-127		
3	Cutoff Frequency Offset	0 – 127	0-127		●
4	Resonance	1.0 – 12.0	10-120		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		
11	Drive	0 – 127	0-127		
12	EQ Low Gain(distortion)	-12 – +12dB	52-76		
13	EQ Mid Gain(distortion)	-12 – +12dB	52-76		
14	LPF Cutoff	1.0kHz – thru	34-60	table#3	
15	Output Level	0 – 127	0-127		
16					



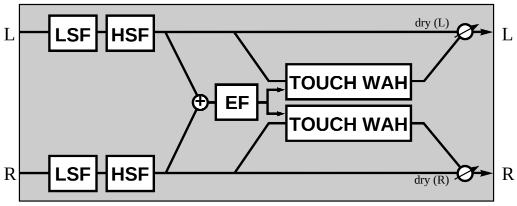
● TOUCH WAH 1
(Variation, Insertion 1, 2 block)
TOUCH WAH+DIST (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Sensitive	0 – 127	0-127		
2	Cutoff Frequency Offset	0 – 127	0-127		●
3	Resonance	1.0 – 12.0	10-120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		
11	Drive (Variation block)	0 – 127	0-127		
12					
13					
14					
15					
16					

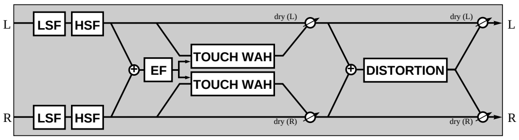
Variation Block: TOUCH WAH 1



Insertion Block: TOUCH WAH 1



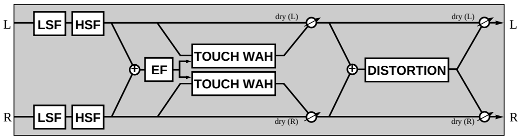
Variation Block: TOUCH WAH+DIST



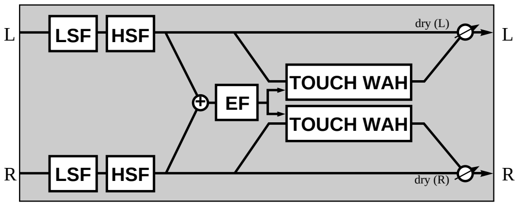
● TOUCH WAH 2 (Variation, Insertion 1, 2 block) TOUCH WAH+ODRV (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Sensitive	0 – 127	0-127		
2	Cutoff Frequency Offset	0 – 127	0-127		●
3	Resonance	1.0 – 12.0	10-120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4-40	table#3	
7	EQ Low Gain	-12 – +12dB	52-76		
8	EQ High Frequency	500Hz – 16.0kHz	28-58	table#3	
9	EQ High Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		
11	Drive	0 – 127	0-127		
12	EQ Low Gain(distortion)	-12 – +12dB	52-76		
13	EQ Mid Gain(distortion)	-12 – +12dB	52-76		
14	LPF Cutoff	1.0kHz – thru	34-60	table#3	
15	Output Level	0 – 127	0-127		
16	Release	10 – 680ms	52-67		

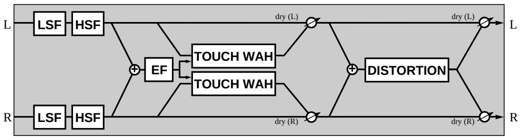
Variation Block: TOUCH WAH 2



Insertion Block: TOUCH WAH 2



Variation Block: TOUCH WAH+ODRV

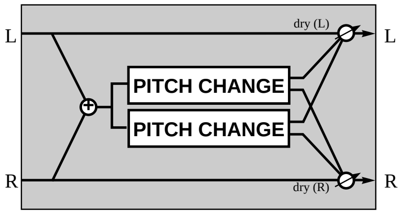


● PITCH CHANGE 1 (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Pitch	-24 – +24	40-88		
2	Initial Delay	0 – 127	0-127	table#7	
3	Fine 1	-50 – +50	14-114		
4	Fine 2	-50 – +50	14-114		
5	Feedback Level	-99 – +99%	1-127		
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Pan 1	L63 – R63	1-127		
12	Output Level 1	0 – 127	0-127		
13	Pan 2	L63 – R63	1-127		
14	Output Level 2	0 – 127	0-127		
15					
16					

PITCH CHANGE 2 (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Pitch	-24 – +24	40-88		
2	Initial Delay	0 – 127	0-127	table#7	
3	Fine 1	-50 – +50cent	14-114		
4	Fine 2	-50 – +50cent	14-114		
5	Feedback Level	-99 – +99%	1-127		
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Pan 1	L63 – R63	1-127		
12	Output Level 1	0 – 127	0-127		
13	Pan 2	L63 – R63	1-127		
14	Output Level 2	0 – 127	0-127		
15					
16					

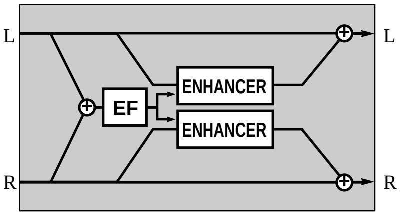


● HARMONIC ENHANCER*
(Variation, Insertion 1, 2 block)

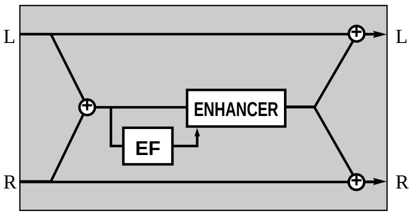
No.	Parameter	Display	Value	See Table	Control
1	HPF Cutoff	500Hz – 16.0kHz	28-58	table#3	●
2	Drive	0 – 127	0-127		
3	Mix Level	0 – 127	0-127		
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

* The Harmonic Enhancer produces the same effect as its MU series predecessor.

Variation Block



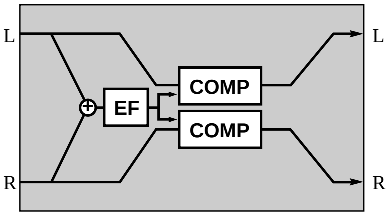
Insertion Block



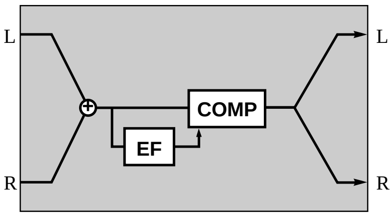
● COMPRESSOR
(Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	Attack	1 – 40ms	0-19	table#8	
2	Release	10 – 680ms	0-15	table#9	
3	Threshold	-48 – -6dB	79-121		
4	Ratio	1.0 – 20.0	0-7	table#10	
5	Output Level	0 – 127	0-127		
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

Variation Block



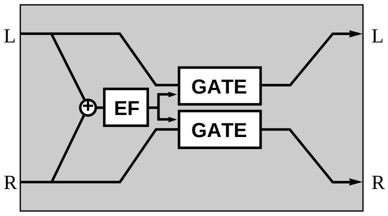
Insertion Block



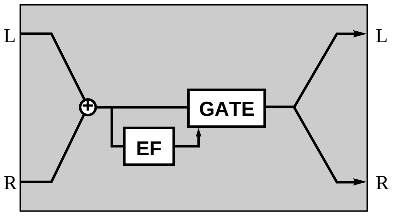
● NOISE GATE (Variation, Insertion 1, 2 block)

No.	Parameter	Display	Value	See Table	Control
1	Attack	1 – 40ms	0-19	table#8	
2	Release	10 – 680ms	0-15	table#9	
3	Threshold	-72 – -30dB	55-97		
4	Output Level	0 – 127	0-127		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

Variation Block

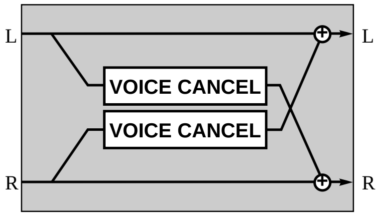


Insertion Block



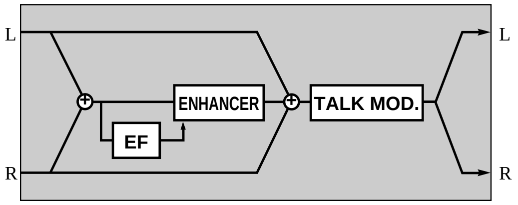
● VOICE CANCEL (Variation block)

No.	Parameter	Display	Value	See Table	Control
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11	Low Adjust	0 – 26	0-26		
12	High Adjust	0 – 26	0-26		
13					
14					
15					
16					



● TALKING MODULATOR (Variation block)

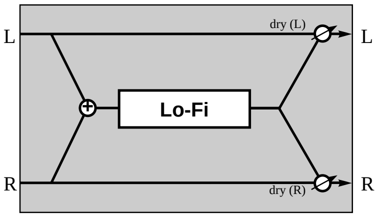
No.	Parameter	Display	Value	See Table	Control
1	Vowel	a,i,u,e,o	0-4		●
2	Move speed	1 – 62	1-62		
3	Drive	0 – 127	0-127		
4	Output level	0 – 127	0-127		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					



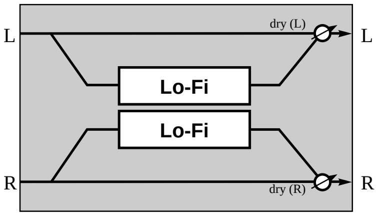
● LO-FI (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	sampling freq control	44.1kHz – 345Hz	0-127		
2	word length	1 – 127	1-127		
3	output gain	-6 – +12dB	0-18		
4	LPF Cutoff	63Hz – thru	10-60		
5	filter type	Thru,PowerBass,Radio,Telephone,Clean,Low	0-5		
6	LPF resonance	1.0 – 12.0	10-120		
7	bit assign	0 – 6	0-6		
8	emphasis	off/on	0-1		
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11					
12					
13					
14					
15	Input Mode	mono/stereo	0-1		
16					

When input mode="mono"

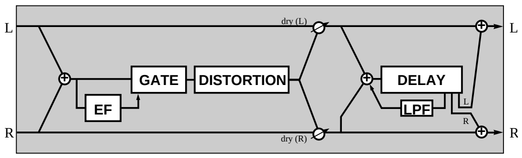


When input mode="stereo"



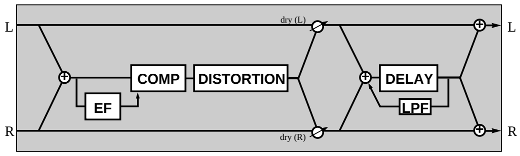
● DIST+DELAY (Variation block)
OVERDRIVE+DELAY (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay Time	0.1 – 1486.0ms	1-14860		
2	Rch Delay Time	0.1 – 1486.0ms	1-14860		
3	Delay Feedback Time	0.1 – 1486.0ms	1-14860		
4	Delay Feedback Level	-63 – +63	1-127		
5	Delay Mix	0 – 127	0-127		
6	Dist Drive	0 – 127	0-127		
7	Dist Output Level	0 – 127	0-127		
8	Dist EQ Low Gain	-12 – +12dB	52-76		
9	Dist EQ Mid Gain	-12 – +12dB	52-76		
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11					
12					
13					
14					
15					
16					



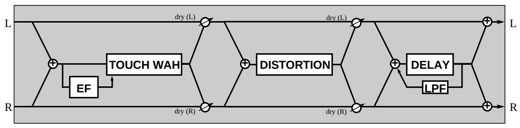
● COMP+DIST+DELAY (Variation block)
COMP+ODRV+DELAY (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.1 – 1486.0ms	1-14860		
2	Delay Feedback Level	-63 – +63	1-127		
3	Delay Mix	0 – 127	0-127		
4	Dist Drive	0 – 127	0-127		
5	Dist Output Level	0 – 127	0-127		
6	Dist EQ Low Gain	-12 – +12dB	52-76		
7	Dist EQ Mid Gain	-12 – +12dB	52-76		
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Comp. Attack	1ms – 40ms	0-19	table#8	
12	Comp. Release	10ms – 680ms	0-15	table#9	
13	Comp. Threshold	-48dB – -6dB	79-121		
14	Comp. Ratio	1.0 – 20.0	0-7	table#10	
15					
16					



● WAH+DIST+DELAY (Variation block)
WAH+ODRV+DELAY (Variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.1 – 1486.0ms	1-14860		
2	Delay Feedback Level	-63 – +63	1-127		
3	Delay Mix	0 – 127	0-127		
4	Dist Drive	0 – 127	0-127		
5	Dist Output Level	0 – 127	0-127		
6	Dist EQ Low Gain	-12 – +12dB	52-76		
7	Dist EQ Mid Gain	-12 – +12dB	52-76		
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1-127		●
11	Wah Sensitive	0 – 127	0-127		
12	Wah Cutoff Freq Offset	0 – 127	0-127		
13	Wah Resonance	1.0 – 12.0	10-120		
14	Wah Release	10 – 680ms	52-67		
15					
16					



Explanation of effect parameters

Parameter name	Effect types in which the parameter exists	Explanation of parameter
AM Depth	TREMOLO	Depth of volume modulation
AMP Type	AMP SIMULATOR	Select the type of amp to be simulated
Attack	COMPRESSOR type NOISE GATE	Time until the compressor effect begins to apply Time until the gate begins to open
Bit Assign	LO-FI	Adjust the word length of the audio data
Cch Delay	DELAY L,C,R	Length of the center channel delay
Cch Level	DELAY L,C,R	Volume of the center channel
Crossover Frequency	2WAY ROTARY SPEAKER	Crossover frequency between the high-range and low-range speakers
Cutoff Frequency Offset	WAH type	Frequency offset value that will control the wah filter
Delay Mix	DIST+DELAY,OVERDRIVE+DELAY, COMP+DIST+DELAY,COMP+ODRV+DELAY, WAH+DIST+DELAY,WAH+ODRV+DELAY	Mixing amount of delay sound
Delay Offset	CHORUS type	Offset value of delay modulation
Delay Time	KARAOKE1,2,3 AMBIENCE	Spacing of reflections for karaoke echo Delay length
Delay2 Level	ECHO	Volume of second delay
Density	REVERB type, EARLY REF type	Density of reflections. Higher values produce closer spacing
Depth	REVERB type	Depth of the simulated room
Detune	ENSEMBLE DETUNE	Amount of pitch shift
Diffusion	REVERB type, EARLY REF type, PHASER	Control the spaciousness
Drive	DISTORTION type HARMONIC ENHANCER* TALKING MODULATION	Depth of distortion Depth at which the exciter effect is applied Depth at which the exciter effect is applied
Drive High	2WAY ROTARY SPEAKER	Depth of modulation caused by rotation of the low-range speaker
Drive Low	2WAY ROTARY SPEAKER	Depth of modulation caused by rotation of the high-range speaker
Dry/Wet	All types	Balance between dry sound and effect sound
Edge(Clip Curve)	DISTORTION type	Curve of distortion characteristics (sharp(127) distorts suddenly, mild(0) distorts gradually)
Emphasis	LO-FI	Modify the character of the high range
EQ High Frequency	All types	Frequency at which the EQ will boost/cut the high range
EQ High Gain	All types	Gain amount by which the EQ will boost/cut the high range
EQ Low Frequency	All types	Frequency at which the EQ will boost/cut the low range
EQ Low Gain	All types	Gain amount by which the EQ will boost/cut the low range
EQ Mid Frequency	All types	Frequency at which the EQ will boost/cut the mid range
EQ Mid Gain	All types	Gain amount by which the EQ will boost/cut the mid range
EQ Mid Width	All types	Width of the area boosted/cut by the mid-range EQ
Er/Rev Balance	REVERB type	Level balance between the early reflections and the reverberation
F/R Depth	AUTO PAN	Depth of front/back panning (valid when PAN Direction=Lturn,Rturn)
Feedback Delay	DELAY L,C,R	Length of feedback delay
Feedback Delay 1	DELAY L,R	Length of feedback delay 1
Feedback Delay 2	DELAY L,R	Length of feedback delay 2
Feedback Level	REVERB type DELAY type,EARLY REF type,PITCH CHANGE type KARAOKE type CHORUS type, FLANGER type PHASER type	Feedback amount of initial delay Feedback amount Setting for repeated reflections Level at which delay output is again returned to the input (negative values invert the phase) Level at which phaser output is again returned to the input (negative values insert the phase)
Filter Type	LO-FI	Select the type of tonal effect
Fine 1	PITCH CHANGE type	Fine adjustment to pitch of first sound
Fine 2	PITCH CHANGE type	Fine adjustment to pitch of second sound
Height	REVERB type	Height of simulated room
High Adjust	VOICE CANCELAR	Adjust the upper limit of the mid-frequency range that will be attenuated
High Damp	REVERB type,DELAY type,EARLY REF type	Attenuation of the high frequency range (lower values will cause the high range to decay more rapidly)
HPF Cutoff	REVERB type,EARLY REF type,KARAOKE type,HARMONIC ENHANCER*	Frequency at which the high pass filter will cut the low range
Initial Delay	REVERB type EARLY REF type PITCH CHANGE type	Delay time until the early reflections Delay length until ER (GateReverb) sounds Delay length
Input Mode	All types	Mono/stereo switch for input
Input Select	CROSS DELAY	Input select
L/R Depth	AUTO PAN	Depth of left/right panning
L->R Delay	CROSS DELAY	Delay time from left (input) to right (output)
Lch Delay	DELAY type	Length of left channel delay
Lch Delay1	ECHO	Length of first left channel delay
Lch Delay2	ECHO	Length of second left channel delay
Lch Feedback Level	ECHO	Amount of left channel feedback
Lch Init Delay	ENSEMBLE DETUNE	Length of left channel delay
LFO Depth	CHORUS type,FLANGER type,SYMPHONIC ROTARY SPEAKER PHASER type WAH type	Depth of delay modulation Depth of modulation caused by speaker rotation Depth of phase modulation Depth at which the wah filter will be controlled
LFO Frequency	CHORUS type,FLANGER type,SYMPHONIC ROTARY SPEAKER TREMOLO AUTO PAN PHASER type WAH type	Frequency of delay modulation Frequency at which the speaker will rotate Modulation frequency Autopan frequency Phase modulation frequency Frequency at which wah filter will be controlled

* The Harmonic Enhancer produces the same effect as its MU series predecessor.

LFO Phase Difference	PHASER type,FLANGER type	L/R phase difference for modulation waveform (0 deg (=64) is no phase difference)
Liveness	EARLY REF type	ER decay. Lower values cause faster decay.
Low Adjust	VOICE CANCEL	Adjust the lower frequency limit of the mid-range that will be attenuated
Low/High	2WAY ROTARY SPEAKER	Volume balance between the high-range and low-range speakers
LPF Cutoff	All types	Frequency at which the low pass filter will cut the high frequency range
LPF Resonance	LO-FI	Add character to the low pass filter of the input
Mic L-R Angle	2WAY ROTARY SPEAKER	L/R angle of the mic that picks up the output
Mix Level	HARMONIC ENHANCER*	Level of the effect sound that is mixed into the dry sound
Move Speed	TALKING MODULATOR	Time over which the sound specified by Vowel is reached
Output Gain	LO-FI	Output gain
Output Level	All types	Output level
Output Level 1	PITCH CHANGE type	Output level for first unit
Output Level 2	PITCH CHANGE type	Output level for second unit
Output Phase	AMBIENCE	Swap phase of the effect sound between L/R
Pan 1	PITCH CHANGE type	Pan of first unit
Pan 2	PITCH CHANGE type	Pan of second unit
PAN Direction	AUTO PAN	Autopan type (L<->R is sine wave, L/R is square wave)
Phase Shift Offset	PHASER type	Offset value for phase modulation
Pitch	PITCH CHANGE type	Pitch setting in semitones
PM Depth	TREMOLO	Depth of delay modulation
R->L Delay	CROSS DELAY	Delay time from right (input) to left (output)
Ratio	COMPRESSOR type	Compression ratio of the compressor
Rch Delay	DELAY type	Length of right channel delay
Rch Delay1	ECHO	Length of first right channel delay
Rch Delay2	ECHO	Length of second right channel delay
Rch Feedback Level	ECHO	Amount of right channel feedback
Rch Init Delay	ENSEMBLE DETUNE	Length of right channel delay
Release	COMPRESSOR type NOISE GATE TOUCH WAH2, TOUCH WAH+ODRV	Time until the sound is released from the compressor effect Time until the gate closes Time until the center frequency of the wah filter returns to normal
Resonance	WAH type	Bandwidth of the wah filter
Rev Delay	REVERB type	Delay time between the early reflections and the reverberation
Reverb Time	REVERB type	Length of reverb
Room Size	EARLY REF type	Size of room. Increasing this value will lengthen ER.
Rotor Speed	2WAY ROTARY SPEAKER	Frequency at which the speaker rotates
Sampling Freq Control	LO-FI	Sampling frequency control
Sensitive	WAH type	Sensitivity with which the wah filter will change in response to changes in the input
Stage	PHASER type	Number of steps for the phase shifter
Threshold	COMPRESSOR type NOISE GATE	Input level at which compression will begin Input level at which the gate will begin to open
Type	EARLY REF type	Type selection
Vowel	TALKING MODULATOR	Vowel selection
Wah Release	WAH+DIST+DELAY,WAH+ODRV+DELAY	Time until the center frequency of the wah filter returns to normal
Wall Vary	REVERB type	Condition of the walls of the simulated room (higher values produce more random reflections)
Width	REVERB type	Width of the simulated room
Word Length	LO-FI	Specify the roughness of the sound

* The Harmonic Enhancer produces the same effect as its MU series predecessor.

Additional note: In the preceding pages, indication of effect types such as REVERB-type respectively include the following effect types.

CHORUS type	CHORUS1,CHORUS2,CHORUS3,CHORUS4,CELESTE1,CELESTE2,CELESTE3,CELESTE4
COMPRESSOR type	COMPRESSOR,COMP+DIST, COMP+DIST+DELAY, COMP+OVERDRIVE+DELAY
DELAY type	DELAY L,C,R, DELAY L,R, ECHO, CROSS DELAY, DIST+DELAY, OVERDRIVE+DELAY, COMP+DIST+DELAY, COMP+DIST+DELAY, COMP+OVERDRIVE+DELAY, WAH+DIST+DELAY, WAH+OVERDRIVE+DELAY
DISTORTION type	DISTORTION, OVERDRIVE, AMP SIMULATOR, AUTO WAH+DIST, AUTO WAH+ODRV, TOUCH WAH+DIST, TOUCH WAH+ODRV, COMP+DIST, DIST+DELAY, OVERDRIVE+DELAY, COMP+DIST+DELAY, COMP+DIST+DELAY, COMP+OVERDRIVE+DELAY, WAH+DIST+DELAY, WAH+OVERDRIVE+DELAY
EARLY REF type	EARLY REF1, EARLY REF2, GATE REVERB, REVERSE GATE
FLANGER type	FLANGER1,FLANGER2, FLANGER3
KARAOKE type	KARAOKE1, KARAOKE2, KARAOKE3
PHASER type	PHASER1, PHASER2
PITCH CHANGE type	PITCH CHANGE1, PITCH CHANGE2
REVERB type	HALL1,HALL2,ROOM1,ROOM2,ROOM3,STAGE1,STAGE2,PLATE, WHITE ROOM,TUNNEL,CANYON,BASEMENT
WAH type	AUTO WAH, AUTO WAH+DIST, AUTO WAH+ODRV, TOUCH WAH1, TOUCH WAH2, TOUCH WAH+DIST, TOUCH WAH+ODRV, WAH+DIST+DELAY, WAH+OVERDRIVE+DELAY

Effect Data Assign Table

Table#1
LFO Frequency

Data	Value	Data	Value	Data	Value	Data	Value
0	0.00	32	1.35	64	2.69	96	8.41
1	0.04	33	1.39	65	2.78	97	8.75
2	0.08	34	1.43	66	2.86	98	9.08
3	0.13	35	1.47	67	2.94	99	9.42
4	0.17	36	1.51	68	3.03	100	9.76
5	0.21	37	1.56	69	3.11	101	10.1
6	0.25	38	1.60	70	3.20	102	10.8
7	0.29	39	1.64	71	3.28	103	11.4
8	0.34	40	1.68	72	3.37	104	12.1
9	0.38	41	1.72	73	3.45	105	12.8
10	0.42	42	1.77	74	3.53	106	13.5
11	0.46	43	1.81	75	3.62	107	14.1
12	0.51	44	1.85	76	3.70	108	14.8
13	0.55	45	1.89	77	3.87	109	15.5
14	0.59	46	1.94	78	4.04	110	16.2
15	0.63	47	1.98	79	4.21	111	16.8
16	0.67	48	2.02	80	4.37	112	17.5
17	0.72	49	2.06	81	4.54	113	18.2
18	0.76	50	2.10	82	4.71	114	19.5
19	0.80	51	2.15	83	4.88	115	20.9
20	0.84	52	2.19	84	5.05	116	22.2
21	0.88	53	2.23	85	5.22	117	23.6
22	0.93	54	2.27	86	5.38	118	24.9
23	0.97	55	2.31	87	5.55	119	26.2
24	1.01	56	2.36	88	5.72	120	27.6
25	1.05	57	2.40	89	6.06	121	28.9
26	1.09	58	2.44	90	6.39	122	30.3
27	1.14	59	2.48	91	6.73	123	31.6
28	1.18	60	2.52	92	7.07	124	33.0
29	1.22	61	2.57	93	7.40	125	34.3
30	1.26	62	2.61	94	7.74	126	37.0
31	1.30	63	2.65	95	8.08	127	39.7

Table#2
Modulation Delay Offset

Data	Value	Data	Value	Data	Value	Data	Value
0	0.0	32	3.2	64	6.4	96	9.6
1	0.1	33	3.3	65	6.5	97	9.7
2	0.2	34	3.4	66	6.6	98	9.8
3	0.3	35	3.5	67	6.7	99	9.9
4	0.4	36	3.6	68	6.8	100	10.0
5	0.5	37	3.7	69	6.9	101	11.1
6	0.6	38	3.8	70	7.0	102	12.2
7	0.7	39	3.9	71	7.1	103	13.3
8	0.8	40	4.0	72	7.2	104	14.4
9	0.9	41	4.1	73	7.3	105	15.5
10	1.0	42	4.2	74	7.4	106	17.1
11	1.1	43	4.3	75	7.5	107	18.6
12	1.2	44	4.4	76	7.6	108	20.2
13	1.3	45	4.5	77	7.7	109	21.8
14	1.4	46	4.6	78	7.8	110	23.3
15	1.5	47	4.7	79	7.9	111	24.9
16	1.6	48	4.8	80	8.0	112	26.5
17	1.7	49	4.9	81	8.1	113	28.0
18	1.8	50	5.0	82	8.2	114	29.6
19	1.9	51	5.1	83	8.3	115	31.2
20	2.0	52	5.2	84	8.4	116	32.8
21	2.1	53	5.3	85	8.5	117	34.3
22	2.2	54	5.4	86	8.6	118	35.9
23	2.3	55	5.5	87	8.7	119	37.5
24	2.4	56	5.6	88	8.8	120	39.0
25	2.5	57	5.7	89	8.9	121	40.6
26	2.6	58	5.8	90	9.0	122	42.2
27	2.7	59	5.9	91	9.1	123	43.7
28	2.8	60	6.0	92	9.2	124	45.3
29	2.9	61	6.1	93	9.3	125	46.9
30	3.0	62	6.2	94	9.4	126	48.4
31	3.1	63	6.3	95	9.5	127	50.0

Table#3
EQ Frequency

Data	Value	Data	Value
0	THRU(20)	32	800
1	22	33	900
2	25	34	1.0k
3	28	35	1.1k
4	32	36	1.2k
5	36	37	1.4k
6	40	38	1.6k
7	45	39	1.8k
8	50	40	2.0k
9	56	41	2.2k
10	63	42	2.5k
11	70	43	2.8k
12	80	44	3.2k
13	90	45	3.6k
14	100	46	4.0k
15	110	47	4.5k
16	125	48	5.0k
17	140	49	5.6k
18	160	50	6.3k
19	180	51	7.0k
20	200	52	8.0k
21	225	53	9.0k
22	250	54	10.0k
23	280	55	11.0k
24	315	56	12.0k
25	355	57	14.0k
26	400	58	16.0k
27	450	59	18.0k
28	500	60	THRU(20.0k)
29	560		
30	630		
31	700		

Table#5
Delay Time(200.0ms)

Data	Value	Data	Value
0	0.1	32	50.5
1	1.7	33	52.0
2	3.2	34	53.6
3	4.8	35	55.2
4	6.4	36	56.8
5	8.0	37	58.3
6	9.5	38	59.9
7	11.1	39	61.5
8	12.7	40	63.1
9	14.3	41	64.6
10	15.8	42	66.2
11	17.4	43	67.8
12	19.0	44	69.4
13	20.6	45	70.9
14	22.1	46	72.5
15	23.7	47	74.1
16	25.3	48	75.7
17	26.9	49	77.2
18	28.4	50	78.8
19	30.0	51	80.4
20	31.6	52	81.9
21	33.2	53	83.5
22	34.7	54	85.1
23	36.3	55	86.7
24	37.9	56	88.2
25	39.5	57	89.8
26	41.0	58	91.4
27	42.6	59	93.0
28	44.2	60	94.5
29	45.7	61	96.1
30	47.3	62	97.7
31	48.9	63	99.3

Table#4
Reverb time

Data	Value	Data	Value	Data	Value
0	0.3	32	3.5	64	17.0
1	0.4	33	3.6	65	18.0
2	0.5	34	3.7	66	19.0
3	0.6	35	3.8	67	20.0
4	0.7	36	3.9	68	25.0
5	0.8	37	4.0	69	30.0
6	0.9	38	4.1		
7	1.0	39	4.2		
8	1.1	40	4.3		
9	1.2	41	4.4		
10	1.3	42	4.5		
11	1.4	43	4.6		
12	1.5	44	4.7		
13	1.6	45	4.8		
14	1.7	46	4.9		
15	1.8	47	5.0		
16	1.9	48	5.5		
17	2.0	49	6.0		
18	2.1	50	6.5		
19	2.2	51	7.0		
20	2.3	52	7.5		
21	2.4	53	8.0		
22	2.5	54	8.5		
23	2.6	55	9.0		
24	2.7	56	9.5		
25	2.8	57	10.0		
26	2.9	58	11.0		
27	3.0	59	12.0		
28	3.1	60	13.0		
29	3.2	61	14.0		
30	3.3	62	15.0		
31	3.4	63	16.0		

Table#6
Room Size

Data	Value	Data	Value
0	0.1	32	5.1
1	0.3	33	5.3
2	0.4	34	5.4
3	0.6	35	5.6
4	0.7	36	5.7
5	0.9	37	5.9
6	1.0	38	6.1
7	1.2	39	6.2
8	1.4	40	6.4
9	1.5	41	6.5
10	1.7	42	6.7
11	1.8	43	6.8
12	2.0	44	7.0
13	2.1		
14	2.3		
15	2.5		
16	2.6		
17	2.8		
18	2.9		
19	3.1		
20	3.2		
21	3.4		
22	3.5		
23	3.7		
24	3.9		
25	4.0		
26	4.2		
27	4.3		
28	4.5		
29	4.6		
30	4.8		
31	5.0		

Table#7

Delay Time (400.0ms)

Data	Value	Data	Value	Data	Value	Data	Value
0	0.1	32	100.9	64	201.6	96	302.4
1	3.2	33	104.0	65	204.8	97	305.5
2	6.4	34	107.2	66	207.9	98	308.7
3	9.5	35	110.3	67	211.1	99	311.8
4	12.7	36	113.5	68	214.2	100	315.0
5	15.8	37	116.6	69	217.4	101	318.1
6	19.0	38	119.8	70	220.5	102	321.3
7	22.1	39	122.9	71	223.7	103	324.4
8	25.3	40	126.1	72	226.8	104	327.6
9	28.4	41	129.2	73	230.0	105	330.7
10	31.6	42	132.4	74	233.1	106	333.9
11	34.7	43	135.5	75	236.3	107	337.0
12	37.9	44	138.6	76	239.4	108	340.2
13	41.0	45	141.8	77	242.6	109	343.3
14	44.2	46	144.9	78	245.7	110	346.5
15	47.3	47	148.1	79	248.9	111	349.6
16	50.5	48	151.2	80	252.0	112	352.8
17	53.6	49	154.4	81	255.2	113	355.9
18	56.8	50	157.5	82	258.3	114	359.1
19	59.9	51	160.7	83	261.5	115	362.2
20	63.1	52	163.8	84	264.6	116	365.4
21	66.2	53	167.0	85	267.7	117	368.5
22	69.4	54	170.1	86	270.9	118	371.7
23	72.5	55	173.3	87	274.0	119	374.8
24	75.7	56	176.4	88	277.2	120	378.0
25	78.8	57	179.6	89	280.3	121	381.1
26	82.0	58	182.7	90	283.5	122	384.3
27	85.1	59	185.9	91	286.6	123	387.4
28	88.3	60	189.0	92	289.8	124	390.6
29	91.4	61	192.2	93	292.9	125	393.7
30	94.6	62	195.3	94	296.1	126	396.9
31	97.7	63	198.5	95	299.2	127	400.0

Table#11

Reverb Width; Depth; Height

Data	Value	Data	Value	Data	Value	Data	Value
0	0.5	32	8.8	64	17.6	96	27.5
1	0.8	33	9.1	65	17.9	97	27.8
2	1.0	34	9.4	66	18.2	98	28.1
3	1.3	35	9.6	67	18.5	99	28.5
4	1.5	36	9.9	68	18.8	100	28.8
5	1.8	37	10.2	69	19.1	101	29.2
6	2.0	38	10.4	70	19.4	102	29.5
7	2.3	39	10.7	71	19.7	103	29.9
8	2.6	40	11.0	72	20.0	104	30.2
9	2.8	41	11.2	73	20.2		
10	3.1	42	11.5	74	20.5		
11	3.3	43	11.8	75	20.8		
12	3.6	44	12.1	76	21.1		
13	3.9	45	12.3	77	21.4		
14	4.1	46	12.6	78	21.7		
15	4.4	47	12.9	79	22.0		
16	4.6	48	13.1	80	22.4		
17	4.9	49	13.4	81	22.7		
18	5.2	50	13.7	82	23.0		
19	5.4	51	14.0	83	23.3		
20	5.7	52	14.2	84	23.6		
21	5.9	53	14.5	85	23.9		
22	6.2	54	14.8	86	24.2		
23	6.5	55	15.1	87	24.5		
24	6.7	56	15.4	88	24.9		
25	7.0	57	15.6	89	25.2		
26	7.2	58	15.9	90	25.5		
27	7.5	59	16.2	91	25.8		
28	7.8	60	16.5	92	26.1		
29	8.0	61	16.8	93	26.5		
30	8.3	62	17.1	94	26.8		
31	8.6	63	17.3	95	27.1		

Table#8

Compressor Attack Time

Data	Value
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10
10	12
11	14
12	16
13	18
14	20
15	23
16	26
17	30
18	35
19	40

Table#9

Compressor Release Time

Data	Value
0	10
1	15
2	25
3	35
4	45
5	55
6	65
7	75
8	85
9	100
10	115
11	140
12	170
13	230
14	340
15	680

Table#10

Compressor Ratio

Data	Value
0	1.0
1	1.5
2	2.0
3	3.0
4	5.0
5	7.0
6	10.0
7	20.0

MIDI data format

1. Channel messages

1.1 Note on/note off

These messages convey keyboard performance data.

Range of note numbers received = 0 (C-2)...60 (C3)...127 (G8)

Velocity range = 1...127 (Velocity is received only for note-on)

When the Multi Part parameter "Rcv NOTE MESSAGE" = OFF, that part will not receive these messages.

For a drum part*, key-off is not received if the DrumSetup parameter Rcv NOTE OFF = OFF.

For a drum part, key-on is not received if the DrumSetup parameter Rcv NOTE ON = OFF.

* Drum Part indicates that the Multi Part parameter PART MODE is "set to DRUM or DRUMS1...4."

1.2 Control changes

These messages control volume or pan etc.

Their functions are differentiated by the control number (Ctrl#).

If the Multi Part parameter Rcv CONTROL CHANGE = OFF, that part will not receive control changes.

1.2.1 Bank Select

This message selects the voice bank.

Control#	Parameter	Data Range
0	Bank Select MSB	0...127
32	Bank Select LSB	0...127

The Bank Select data will be processed only after a Program Change is received, and then voice bank will change at that time.

If you wish to change the voice bank as well as the voice, you must transmit Bank Select and Program Change messages as a set, in the order of Bank Select MSB, LSB, and Program Change.

1.2.2 Modulation

This message is used primarily to control the depth of vibrato, but the depth of the following 7 types of effect can be controlled.

The effect of this message can be changed by the following parameters.

• Multi Part Parameter
1. MW PITCH CONTROL
2. MW FILTER CONTROL
3. MW AMPLITUDE CONTROL
4. MW LFO PMOD DEPTH
5. MW LFO FMOD DEPTH
6. MW LFO AMOD DEPTH
• Effect1 Parameter
7. MW VARIATION CONTROL DEPTH
(Valid when Variation Effect is assigned to a part as Insertion)
• Effect2 Parameter
8. MW INSERTION CONTROL DEPTH

By default, an LFO Pitch Modulation (PMOD) effect will apply.

Control#	Parameter	Data Range
1	Modulation	0...127

If the Multi Part parameter Rcv MODULATION = OFF, that part will not receive Modulation.

If the receive channel is a drum part, effects 5 and 6 will not apply.

1.2.3 Portamento Time

This message controls the degree of Portamento (refer to 1.2.9).

Control#	Parameter	Data Range
5	Portamento Time	0...127

When Portamento (control number 065) is ON, this regulates the speed of the pitch change.

A value of 0 is the shortest portamento time, and 127 is the longest portamento time.

If the receive channel is a drum part, Portamento Time is not received.

1.2.4 Data Entry

This message sets the value of the parameter which was specified by RPN MSB/LSB (see 1.2.22) and NRPN MSB/LSB (see 1.2.21).

Control#	Parameter	Data Range
6	Data Entry MSB	0...127
38	Data Entry LSB	0...127

1.2.5 Main Volume

This message controls the volume of each part.

This is used to adjust the volume balance between parts.

Control#	Parameter	Data Range
7	Main Volume	0...127

When the Multi Part parameter Rcv VOLUME = OFF, that part will not receive Main Volume.

With a value of 0 there will be no sound, and a value of 127 will be the maximum volume.

1.2.6 Panpot

This message control the panning (stereo location) of each part.

Control#	Parameter	Data Range
10	Pan	0...64...127

When the Multi Part parameter Rcv PAN = OFF, that part will not receive Panpot.

0 is left, 64 is center, and 127 is right.

1.2.7 Expression

This message controls expression (dynamics within a musical line) for each part.
It is used to create volume changes during a song.

Control#	Parameter	Data Range
11	Expression	0...127

If the Multi Part parameter Rcv EXPRESSION = OFF, that part will not receive Expression.

1.2.8 Hold1

This message controls sustain pedal on/off.

Control#	Parameter	Data Range
64	Hold1	0...63,64...127
		(OFF, ON)

When this is ON, currently-sounding notes will continue to sound even if note-off messages are received.
If the Multi Part parameter Rcv HOLD1 = OFF, that part will not receive Hold1.

1.2.9 Portamento

This message controls portamento on/off.

Control#	Parameter	Data Range
65	Portamento	0...63, 64...127
		(OFF, ON)

When this is ON, the pitch will change smoothly between notes. The time over which the pitch changes is adjusted by Portamento Time (see 1.2.3). Also, when the Multi Part parameter MONO/POLY MODE = MONO, the tone will also change smoothly (legato) if Portamento = ON.
If any of the following Multi Part parameter settings apply, that part will not receive Portamento.
• Rcv PORTAMENTO = OFF
• PART MODE = DRUM, DRUMS1...4

1.2.10 Sostenuto

This message controls sostenuto pedal on/off.

Control#	Parameter	Data Range
66	Sostenuto	0...63,64...127
		(OFF, ON)

If sostenuto is turned on while a note is sounding, that note will be sustained until sostenuto is turned OFF.
If the Multi Part parameter Rcv SOSTENUTO = OFF, that part will not receive Sostenuto.

1.2.11 Soft Pedal

This message controls soft pedal on/off.

Control#	Parameter	Data Range
67	Soft Pedal	0...63, 64...127
		(OFF, ON)

The sound will become mellower when Soft Pedal is ON.
If any of the following Multi Part parameter settings apply, that part will not receive the Soft Pedal.
• Rcv SOFT PEDAL = OFF
• PART MODE = DRUM, DRUM1...4

1.2.12 Harmonic Content

This message adjusts the resonance of the filter that is specified for the sound.

Control#	Parameter	Data Range
71	Harmonic Content	0...64...127
		(-64...0...+63)

Since this is a relative change parameter, it specifies a boost or cut relative to 64.
Higher values will produce a more distinctive sound.
For some sounds, the effective range may be less than the possible range of settings.

1.2.13 Release Time

This message adjusts the EG release time that was specified by the sound data.

Control#	Parameter	Data Range
72	Release Time	0...64...127
		(-64...0...+63)

Since this is a relative change parameter, it specifies an increase or decrease relative to 64.
Increasing this value will lengthen the release that follows a note-off.

1.2.14 Attack Time

This message adjusts the EG attack time that was specified by the sound data.

Control#	Parameter	Data Range
73	Attack Time	0...64...127
		(-64...0...+63)

Since this a relative change parameter, it specifies an increase or decrease relative to 64.
Increasing this value will make the attack more gradual, and decreasing this value will make the attack sharper.

1.2.15 Brightness

This message adjusts the cutoff frequency of the low pass filter specified by the sound data.

Control#	Parameter	Data Range
74	Brightness	0...64...127
		(-64...0...+63)

Since this is a relative change parameter, it specifies an increase or decrease relative to 64.
Lower values will produce a more mellow sound.
For some sounds, the effective range may be less than the possible range of settings.

1.2.16 Portamento Control

This message specifies the portamento source key number (the key number at which portamento will begin).
Data of 0...127 specifies the portamento source key.
When Portamento Control is received, the currently-sounding pitch will change at a Portamento Time of 0 to the key of the next-received note-on of the same channel.

Control#	Parameter	Data Range
84	Portamento Control	0...127 (C-2...G8)

This is received even if Rcv PORTAMENTO = OFF.

1.2.17 Effect1 Depth(Reverb Send Level)

This message specifies the send level for the reverb effect.

Control#	Parameter	Data Range
91	Effect1 Depth	0...127

Increasing this value will produce a richer reverb. The effect of the value will depend on the state of the reverb effect.

1.2.18 Effect3 Depth(Chorus Send Level)

This message specifies the send level for the chorus effect.

Control#	Parameter	Data Range
93	Effect3 Depth	0...127

Raising this value will increase the modulation or spaciousness. The effect of the value will depend on the state of the chorus effect.

1.2.19 Effect4 Depth (Variation Effect Send Level)

This message specifies the send level for the variation effect.

Control#	Parameter	Data Range
94	Effect4 Depth	0...127

However, this is not received if the Variation Effect parameter Variation Connection = 0 (Insertion).

1.2.20 Data Increment/Decrement (for RPN)

This message increases or decreases the parameter value specified for RPN (see 1.2.22), by increments of 1.

Control#	Parameter	Data Range
96	RPN Increment	--
97	RPN Decrement	--

The data byte is ignored.

1.2.21 NRPN (Non-registered parameter number)

This message is used to specify a sound parameter (such as vibrato, filter, EG, drum setup etc.) as an offset value.
Use NRPN MSB and NRPN LSB to specify the parameter that you wish to modify, and then use Data Entry (see 1.2.4) to set the value for the specified parameter.

Control#	Parameter	Data Range
98	NRPN LSB	0...127
99	NRPN MSB	0...127

If the Multi Part parameter Rcv NRPN = OFF, that part will not receive NRPN.

The following NRPN messages can be received.

NRPN MSB	NRPN LSB	Data Entry *1 MSB	Data Entry *1 LSB	Parameter name and value range
01	08	mm	-- *2	Vibrato rate mm: 00 - 64 - 127 (-64...0...+63)
01	09	mm	--	Vibrato depth mm: 00 - 64 - 127 (-64...0...+63)
01	10	mm	-- *3	Vibrato delay mm: 00 - 64 - 127 (-64...0...+63)
01	32	mm	--	Low pass filter cutoff frequency mm: 00 - 64 - 127 (-64...0...+63)
01	33	mm	--	Low pass filter resonance mm : 00 - 64 - 127 (-64...0...+63)
01	36	mm	--	High pass filter cutoff frequency mm: 00 - 64 - 127 (-64...0...+63)
01	48	mm	-- *4	EQ bass gain mm: 00 - 64 - 127 (-64...0...+63)
01	49	mm	-- *4	EQ treble gain mm: 00 - 64 - 127 (-64...0...+63)
01	52	mm	-- *4	EQ bass frequency mm: 04 - 40 (32...2.0k [Hz])
01	53	mm	-- *4	EQ treble frequency mm: 28 - 58 (500...16.0k [Hz])
01	99	mm	--	EG attack time mm: 00 - 64 - 127 (-64...0...+63)
01	100	mm	--	EG decay time mm: 00 - 64 - 127 (-64...0...+63)
01	102	mm	--	EG release time mm: 00 - 64 - 127 (-64...0...+63)

20	rr	mm	--	Drum low pass filter cutoff frequency rr: drum instrument note number mm: 00 - 64 - 127 (-64...0...+63)
21	rr	mm	--	Drum low pass filter resonance rr: drum instrument note number mm: 00 - 64 - 127 (-64...0...+63)
22	rr	mm	--	Drum EG attack rate rr: drum instrument note number mm: 00 - 64 - 127 (-64...0...+63)
23	rr	mm	--	Drum EG decay rate rr: drum instrument note number mm: 00 - 64 - 127 (-64...0...+63) The effect will apply both to Decay 1 and 2.
24	rr	mm	--	Drum instrument pitch coarse rr: drum instrument note number mm: 00 - 64 - 127 (-64...0...+63)
25	rr	mm	--	Drum instrument pitch fine rr: drum instrument note number mm: 00 - 64 - 127 (-64...0...+63)
26	rr	mm	--	Drum instrument level rr: drum instrument note number mm: 00 - 127(0...maximum)
28	rr	mm	--	Drum instrument panpot rr: drum instrument note number mm: 00, 01-64-127(RND, L63...C...R63)
29	rr	mm	--	Drum instrument reverb send level rr: drum instrument note number mm: 00 - 127(0...maximum)
30	rr	mm	--	Drum instrument chorus send level rr: drum instrument note number mm: 00 - 127(0...maximum)
31	rr	mm	--	Drum instrument variation send level rr: drum instrument note number mm: 00 - 127(0...maximum) (when Variation Connection = SYSTEM)) mm: 00, 01-127 (OFF,ON) (when Variation Connection = INSERTION))
36	rr	mm	--	Drum high pass filter cutoff frequency mm: 00 - 64 - 127 (-64...0...+63)
48	rr	mm	--	Drum EQ bass gain mm: 00 - 64 - 127 (-64...0... +63)
49	rr	mm	--	Drum EQ treble gain mm: 00 - 64 - 127 (-64...0...+63)
52	rr	mm	--	Drum EQ bass frequency mm: 04 - 40(32...2.0k [Hz])
53	rr	mm	--	Drum EQ treble frequency mm: 28 - 58(500...16.0k [Hz])

MSB 14H-35H (for drums) is received when Multi Part parameter PART MODE = DRUMS1...4.

*1 Refer to 1.2.4
*2 '--' indicates that the setting value is ignored.
*3 Adjusts the time after the note is played until vibrato begins to take effect. The effect will begin more quickly for higher values, and more slowly for higher values. No effect if Bank Select MSB=127 is selected.
*4 No effect if Multi Part parameter PART MODE = DRUM, DRUMS1...4.

1.2.22 RPN (Registered parameter number)

This message is used to specify part parameters such as Pitch Bend Sensitivity or Tuning etc. as an offset value.
Use RPN MSB and RPN LSB to specify the parameter that you wish to modify, and then use Data Entry (see 1.2.4) to set the value of the specified parameter.

Control#	Parameter	Data Range
100	RPN LSB	0...127
101	RPN MSB	0...127

If the Multi Part parameter Rcv RPN = OFF, that part will not receive this message.

The following RPN messages can be received.

RPN MSB	RPN LSB	Data Entry*1 MSB	Data Entry*1 LSB	Parameter name and value range
00	00	mm	-- *2	Pitch bend sensitivity mm: 00-24 (0...+24 semitones) Specify up to 2 octaves in semitone steps
00	01	mm	ll	Fine tuning mm ll: 00 00 -100 cents : : mm ll: 64 00 0 cents

				[Note] mm ll: 00 127 (=-87.5) cents is followed by 01 00 (=-87.4) cents.
00	02	mm	--	Coarse tuning mm: 40 - 64 - 88 (-24...0...+24 semitones)
127	127	--	--	RPN Null This sets RPN and NRPN numbers to an unset state. Internal data is not affected.

*1 Refer to 1.2.4
*2 '--' indicates that the setting value is ignored.

1.2.23 Assignable controller

By assigning a control change number of 0...95 to a part, the specified effect can be controlled.
This device allows two control change numbers (AC1 and AC2) to be specified for each part.
The following parameters specify the effect of AC1 and AC2.
• Multi Part Parameter
1. AC1, AC2 PITCH CONTROL
2. AC1, AC2 FILTER CONTROL
3. AC1, AC2 AMPLITUDE CONTROL
4. AC1, AC2 LFO PMOD DEPTH
5. AC1, AC2 LFO FMOD DEPTH
6. AC1, AC2 LFO AMOD DEPTH
• Effect1 Parameter
7. AC1, AC2 VARIATION CONTROL DEPTH
(Valid if Variation Effect is assigned to a part as Insertion)
• Effect 2 Parameter
8. AC1, AC2 INSERTION CONTROL DEPTH

The AC1 control change number is specified by the Multi Part or A/D Part parameter AC1 CONTROLLER NUMBER, and the AC2 control change number is specified by the Multi Part or A/D Part parameter AC2 CONTROLLER NUMBER.

1.3 Channel mode messages

These messages specify the basic operation of a part.

1.3.1 All Sound Off

This message silences all currently-sounding notes on the corresponding channel.
However, the settings of channel messages such as Hold 1 and Sostenuto will be maintained.

Control#	Parameter	Data Range
120	All Sound Off	0

1.3.2 Reset All Controllers

This message resets the following controllers to their default values.

Controller	Value
Pitch bend change	±0 (center)
Channel pressure	0 (off)
Polyphonic key pressure	0 (off)
Modulation	0 (off)
Expression	127 (maximum)
Hold	0 (off)
Portamento	0 (off)
Sostenuto	0 (off)
Soft pedal	0 (off)
Portamento control	Reset the portamento source note number that was received
RPN	Number unset, internal data is not affected.
NRPN	Number unset, internal data is not affected.

The following data is not changed
Parameter values specified by program change, bank select MSB/LSB, volume, pan, effect send levels 1, 3, 4, RPN and NRPN.

Control#	Parameter	Data Range
121	Reset All Controllers	0

1.3.3 All Note Off

This message turns off all notes which are currently on for the corresponding part.
However, if Hold 1 or Sostenuto are on, notes will continue to sound until these are turned off.

Control#	Parameter	Data Range
123	All Note Off	0

1.3.4 Omni Off

Perform the same processing as when All Note Off is received.

Control#	Parameter	Data Range
124	Omni Off	0

1.3.5 Omni On

Perform the same processing as when All Note Off is received.

Control#	Parameter	Data Range
125	Omni On	0

1.3.6 Mono

Perform the same processing as when All Sound Off is received, and if the value (mono number) is in the range of 0...16, set the corresponding channel to Mode4* (m = 1).

Control#	Parameter	Data Range
126	Mono	0...16

* Mode4 is a state in which only channel messages on the specified channel will be received, and notes will be sounded individually (monophonically).

1.3.7 Poly

Perform the same processing as when All Sound Off is received, and set the corresponding channel to Mode3*.

Control#	Parameter	Data Range
127	Poly	0

* Mode3 is when channel messages will be received only on the specified channel, and will be sounded polyphonically.

1.4 Program change

This message reports sound selection changes and changes the program number of the receiving channel.
In order to include changes to the voice bank, Program Change and Bank Select messages must be sent as a set (see 1.2.1).
When RevPROGRAM CHANGE=OFF for Multi Part Parameter, the program change for that part is not received.

1.5 Pitch bend

This message conveys movements of the pitch bender.
This message is generally used to modify the pitch of a part, but the depth of the following seven effects can be controlled.
The effect of this message can be modified by the following parameters.

• Multi Part Parameter
1. BEND PITCH CONTROL
2. BEND FILTER CONTROL
3. BEND AMPLITUDE CONTROL
4. BEND LFO PMOD DEPTH
5. BEND LFO FMOD DEPTH
6. BEND LFO AMOD DEPTH

• Effect1 Parameter
7. BEND VARIATION CONTROL DEPTH

(Valid when Variation Effect is assigned to a part as Insertion)
• Effect2 Parameter
8. BEND INSERTION CONTROL DEPTH

By default, the Pitch Control effect is applied.
If the receive channel is a drum part, effects 5 and 6 will not apply.
If the Multi Part parameter Rcv PITCH BEND CHANGE = OFF, that part will not receive pitch bend messages.

1.6 Channel aftertouch

This message conveys the pressure which is applied to the keyboard after playing a note in order to create tonal changes (for an entire MIDI channel). The pressure can be controlled for each part. This message will affect the currently-sounding notes.
The effect of this message will be determined by the settings of the following parameters.

• Multi Part Parameter
1. CAT PITCH CONTROL
2. CAT FILTER CONTROL
3. CAT AMPLITUDE CONTROL
4. CAT LFO PMOD DEPTH
5. CAT LFO FMOD DEPTH
6. CAT LFO AMOD DEPTH

• Effect1 Parameter
7. CAT VARIATION CONTROL DEPTH

(Valid when the Variation Effect is assigned to a part as Insertion)
• Effect2 Parameter
8. CAT INSERTION CONTROL DEPTH

By default, there will be no effect.
If the receive channel is a drum part, effects 5 and 6 will not apply.
If the Multi Part parameter Rcv CHANNEL AFTER TOUCH = OFF, that part will not receive Channel Aftertouch.

1.7 Polyphonic aftertouch

This message conveys the pressure that is applied to the keyboard after playing a note (for individual note numbers).
The pressure can be controlled independently for each note. This message will affect currently-sounding notes.
The effect of this message is determined by the following Multi Part parameters.

1. PAT PITCH CONTROL
2. PAT FILTER CONTROL
3. PAT AMPLITUDE CONTROL
4. PAT LFO PMOD DEPTH
5. PAT LFO FMOD DEPTH
6. PAT LFO AMOD DEPTH

By default, there will be no effect.
The effect will apply to note numbers 36...97.
In the case of either of the following Multi Part parameter settings, that part will not receive Polyphonic Aftertouch.
Rcv CHANNEL AFTER TOUCH = OFF
PART MODE = DRUM, DRUMS1...4

2. System exclusive messages

2.1 Parameter changes

This devices uses the following parameter changes.

[UNIVERSAL REALTIME MESSAGE]
1) Master Volume

[UNIVERSAL NON REALTIME MESSAGE]
1) General MIDI System On
2) Identity Request(INQUIRY MESSAGE)
3) Identity Reply(INQUIRY MESSAGE)

[XG PARAMETER CHANGE]
1) XG System on
2) XG System parameter change
3) Multi Effect1 parameter change
4) Multi EQ parameter change
5) Multi Effect2 parameter change
6) Display parameter change
7) Multi Part parameter change
8) AD Part parameter change
9) AD System parameter change
10) Drums Setup parameter change
11) Plugin Board parameter change

[MU128 NATIVE PARAMETER CHANGE 1]
1) MU128 System parameter change
2) Remote switch

[MU128 NATIVE PARAMETER CHANGE 2]
1) Current Performance parameter change

[Others]
1) Master tuning

2.1.1 Universal realtime messages

2.1.1.1 Master Volume

	11110000	F0H	= Exclusive status
	01111111	7FH	= Universal Real Time
	01111111	7FH	= ID of target device
	00000100	04H	= Sub-ID #1 = Device Control Message
	00000001	01H	= Sub-ID #2 = Master Volume
*	0sssssss	SSH	= Volume LSB
	0ttttttt	TTH	= Volume MSB
	11110111	F7H	= End of Exclusive

or,

11110000	F0H	= Exclusive status
01111111	7FH	= Universal Real Time
0xxxnnnn	XNH	= Device Number, xxx = don't care
00000100	04H	= Sub-ID #1 = Device Control Message
00000001	01H	= Sub-ID #2 = Master Volume
0sssssss	SSH	= Volume LSB
0ttttttt	TTH	= Volume MSB
11110111	F7H	= End of Exclusive

When this is received, the Volume MSB will be reflected by the System parameter MASTER VOLUME.

* The binary expression 0sssssss is expressed in hexadecimal as SSH.
The same applies elsewhere.

2.1.2 Universal non-realtime messages

2.1.2.1 General MIDI System On

11110000	F0H	= Exclusive status
01111110	7EH	= Universal Non-Real Time
01111111	7FH	= ID of target device
00001001	09H	= Sub-ID #1 = General MIDI Message
00000001	01H	= Sub-ID #2 = General MIDI On
11110111	F7H	= End of Exclusive

or,

11110000	F0H	= Exclusive status
01111110	7EH	= Universal Non-Real Time
0xxxnnnn	XNH	= N:Device Number, X:don't care
00001001	09H	= Sub-ID #1 = General MIDI Message
00000001	01H	= Sub-ID #2 = General MIDI On
11110111	F7H	= End of Exclusive

When this message is received, the SOUND MODULE MODE is set to XG, and all MIDI messages defined by GM will be received.
All data except for MIDI Master Tuning will be restored to the default value.
However this message will not be received in any of the following cases.
• MU128 System Parameter (see table 2-2) Rcv GM EXCLUSIVE MESSAGE= OFF
Since approximately 50[ms] is required in order to process this message, be sure to allow an appropriate interval before sending the next message.

2.1.2.2 Identity Request

11110000	F0H	= Exclusive status
01111110	7EH	= Universal Non-Real Time
0mmmmmmm	MMH	= Device Number
00000110	06H	= Sub-ID #1 = General Information
00000001	01H	= Sub-ID #2 = Identity Request
11110111	F7H	= End of Exclusive

When this message is received, this device will transmit an Identity Reply message as described in the following section 2.1.2.3.

2.1.2.3 Identity Reply

11110000	F0H	= Exclusive status
01111110	7EH	= Universal Non-Real Time
0mmmmmmm	MMH	= Device Number
00000110	06H	= Sub-ID #1 = General Information
00000010	02H	= Sub-ID #2 = Identity Reply
01000011	43H	= YAMAHA ID
00000000	00H	= Device Family Code LSB MU128 ID #1
01000001	41H	= Device Family Code MSB MU128 ID #2
00000000	00H	= Device Number Code LSB MU128 ID #3
000000ll	03H	= Device Number Code MSB MU128 ID #4
00000000	00H	
00000000	00H	
00000000	00H	
00000001	01H	= Tone Generator Code = XG
11110111	F7H	= End of Exclusive

This device will transmit this message when it receives the Identity Request message of 2.1.2.2.

2.1.3 XG parameter change

This message sets XG-related parameters. Each message can set a single parameter.
The message format is as follows.

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0001nnnn	1NH	N:device Number
01001100	4CH	Model ID
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
0sssssss	SSH	Data
:	:	
11110111	F7H	End of Exclusive

For parameters whose Data Size is 2 or 4, the appropriate amount of data will be transmitted as indicated by Size.

2.1.3.1 XG System On

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0001nnnn	1NH	N:device Number
01001100	4CH	Model ID
00000000	00H	Address High
00000000	00H	Address Mid
01111110	7EH	Address Low
00000000	00H	Data
11110111	F7H	End of Exclusive

When On is received, the SOUND MODULE MODE will be set to XG.
Since approximately 50[ms] are required in order to execute this message, please allow an appropriate interval before transmitting the next message.

2.1.3.2 XG System parameter change

This message sets the XG SYSTEM block (refer to tables <1 -1>, <1 - 2>).

2.1.3.3 Multi Effect1 parameter change

This message sets the MULTI EFFECT1 block (refer to tables <1 - 1>, <1 - 4>).

2.1.3.4 Multi EQ parameter change

This message sets the MULTI EQ block (refer to tables <1 - 1>, <1 - 5>).

2.1.3.5 Multi Effect2 parameter change

This message sets the MULTI EFFECT2 block (refer to tables <1 - 1>, <1 - 6>).

2.1.3.6 Display parameter change

This message sets the DISPLAY block (refer to tables <1 - 1>, <1 - 7>).

2.1.3.7 Multi Part parameter change

This message sets the MULTI PART block (refer to tables <1 - 1>, <1 - 8>).

2.1.3.8 AD Part parameter change

This message sets the AD PART block (refer to tables <1 - 1> , <1 - 9>).

2.1.3.9 AD System parameter change

This message sets the AD SYSTEM block (refer to tables <1 - 1>, <1 - 10>).

2.1.3.10 Drums Setup parameter change

This message sets the DRUMS SETUP block (refer to tables <1 - 1> , <1 - 11>).

2.1.3.11 Plugin board parameter change

This messages set the PLUGIN BOARD block (refer to tables <1 - 1> , <1 - 12>).

2.1.4 MU128 native parameter change (1)

This message sets parameters unique to the MU128. Each message sets a single parameter.
As indicated below, the message format is in common with the MU50, MU80, MU90, and MU100.

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0001nnnn	1NH	N:Device Number
01001001	49H	Model ID
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
0vvvvvvv	VVH	Data
:	:	
11110111	F7H	End of Exclusive

For parameters whose Data Size is 2 or 4, the number of data bytes indicated by Size are transmitted.

2.1.4.1 MU128 System parameter change

This message sets the SYSTEM block (refer to tables <2 - 1>, <2 - 2>).

2.1.4.2 Remote Switch

This message sets the REMOTE SWITCH block (refer to tables <2 - 1>, <2 - 3>).

2.1.5 MU128 native parameter change (2)

This message sets parameters which are unique to the MU128. Each message modifies a single parameter.
The format of this message is the same as for the MU90 and MU100, as shown below.

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0001nnnn	1NH	N:Device Number
01011001	59H	Model ID
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
0vvvvvvv	VVH	Data
:	:	
11110111	F7H	End of Exclusive

For parameters whose Data Size is 2 or 4, the number of data bytes indicated by Size are transmitted.

2.1.5.1 Current Performance parameter change

This message sets the CURRENT PERFORMANCE block (refer to tables <3 - 1>, <3 - 2>).

2.1.6 Other parameter changes

2.1.6.1 Master tuning

This message simultaneously modifies the tuning of all channels.

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0001nnnn	1NH	N:device Number
00100111	27H	Model ID
00110000	30H	Address High
00000000	00H	Address Mid
00000000	00H	Address Low
0000mmmm	0MH	Master Tune MSB
0000llll	0LH	Master Tune LSB
0xxxxxxx	XXH	don't care
11110111	F7H	End of Exclusive

Normally, the XG SYSTEM message MASTER TUNE should be used (refer to table <1-2>).

2.2 Bulk dump

This device uses the following bulk dump messages.

[XG BULK DUMP]
1) XG System bulk dump
2) System Information bulk dump
3) Multi Effect1 bulk dump
4) Multi EQ bulk dump
5) Multi Effect2 bulk dump
6) Multi Part bulk dump
7) AD Part bulk dump
8) AD System bulk dump
9) Drums Setup bulk dump

[MU128 NATIVE BULK DUMP 1]
1) System bulk dump
2) MU80, MU50 Internal Performance bulk dump

[MU128 NATIVE BULK DUMP 2]
1) MU128 Internal Performance bulk dump

2.2.1 XG bulk dump

This message sets XG-related parameters. Unlike parameter change messages, a single message can modify multiple parameters. The message format is as follows.

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0000nnnn	0NH	N:Device Number
01001100	4CH	Model ID
0sssssss	SSH	ByteCountMSB
0ttttttt	TTH	ByteCountLSB
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
0vvvvvvv	VVH	Data
:	:	
0kkkkkkk	KKH	Check-sum
11110111	F7H	End of Exclusive

Address and Byte Count are given in tables 1-n. Byte Count is indicated by the total size of the Data in tables 1-n.
Bulk dump and dump request messages are received when the beginning of the block is specified as the 'Address'.
'Block' indicates the unit of the data string that is indicated in tables 1-n as 'Total size'.
Check sum is the value that produces a lower 7 bits of 0 when the Start Address, Byte Count, Data, and the Check-sum itself are added.

2.2.1.1 XG System bulk dump

This message sets the XG SYSTEM block (refer to tables <1 -1>, <1 - 2>).

2.2.1.2 System Information bulk dump

This message indicates the contents of the SYSTEM INFORMATION block (refer to tables <1 - 1>, <1 - 3>).
This message is transmitted in response to a Dump Request, but this message will be ignored if it is received.

2.2.1.3 Multi Effect1 bulk dump

This message sets the MULTI EFFECT1 block (refer to tables <1 - 1>, <1 - 4>).

2.2.1.4 Multi EQ bulk dump

This message sets the MULTI EQ block (refer to tables <1 - 1>, <1 - 5>).

2.2.1.5 Multi Effect2 bulk dump

This message sets the MULTI EFFECT2 block (refer to tables <1 - 1>, <1 - 6>).

2.2.1.6 Multi Part bulk dump

This message sets the MULTI PART block (refer to tables <1 - 1>, <1 - 8>).

2.2.1.7 A/D Part bulk dump

This message sets the A/D PART block (refer to tables <1 - 1>, <1 - 9>).

2.2.1.8 XG System bulk dump

This message sets the A/D SYSTEM block (refer to tables <1 -1>, <1 - 10>).

2.2.1.9 A/D System bulk dump

This message sets the DRUMS SETUP block (refer to tables <1 - 1>, <1 - 11>).

2.2.2 MU128 native bulk dump (1)

This message modifies parameters unique to the MU128. Unlike parameter change messages, a single message will modify multiple parameters.

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0000nnnn	0NH	N:Device Number
01001001	49H	Model ID
0sssssss	SSH	ByteCountMSB
0ttttttt	TTH	ByteCountLSB
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
0vvvvvvv	VVH	Data
:	:	
0kkkkkkk	KKH	Check-sum
11110111	F7H	End of Exclusive

Details are the same as for 2.2.1 XG Bulk Dump. However, refer to table 2-n for the address, byte count, and block.

2.2.2.1 System bulk dump

This message sets the SYSTEM block (refer to tables <2 - 1>, <2 - 2>).

2.2.2.2 MU80, MU50 Internal Performance bulk dump

This message is in MU80 / MU50 data format. It sets the INTERNAL PERFORMANCE block (refer to tables <2 - 1>, <2 - 4>).

2.2.3 MU128 native bulk dump (2)

This message sets parameters unique to the MU128. Unlike parameter change messages, a single message can modify multiple parameters.

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0000nnnn	0NH	N:Device Number
01011001	59H	Model ID
0sssssss	SSH	ByteCountMSB
0ttttttt	TTH	ByteCountLSB
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
0vvvvvvv	VVH	Data
:	:	
0kkkkkkk	KKH	Check-sum
11110111	F7H	End of Exclusive

Details are the same as for 2.2.1 XG Bulk Dump. However, refer to table 3-n for address, byte count, and block.

2.2.3.1 Internal Performance bulk dump

This message sets the INTERNAL PERFORMANCE block (refer to tables <3 - 1>, <3 - 3>).

2.3 Parameter request

This message requests transmission of a parameter value.
The output is transmitted in the Parameter Change message format (refer to 2.1.3, 2.1.4, and 2.1.5).

2.3.1 XG parameter request

This message requests transmission of XG parameter settings.
Settings are transmitted in the format of an XG parameter change (refer to 2.1.3).

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0011nnnn	3NH	N:device Number
01001100	4CH	Model ID
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
11110111	F7H	End of Exclusive

2.3.2 MU128 native parameter request (1)

This message requests transmission of a parameter value unique to the MU128.
The output is transmitted in the format of a MU128 native parameter change (refer to 2.1.4).

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0011nnnn	3NH	N:Device Number
01001001	49H	Model ID
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
11110111	F7H	End of Exclusive

2.3.3 MU128 native parameter request (2)

This message requests the transmission of a parameter value unique to the MU128.
The output format is the same as for a MU128 native parameter change (refer to 2.1.5).

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0011nnnn	3NH	N:Device Number
01011001	59H	Model ID
0ggggggg	GGH	Address High

0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
11110111	F7H	End of Exclusive

2.4 Dump request

This message requests transmission of a specific block of parameter values.
The output is the same as the bulk dump format.

2.4.1 XG dump request

This message requests transmission of all parameters of the specified block of XG parameters.
The output is the same as the format of XG bulk dump (refer to 2.2.1).

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0010nnnn	2NH	N:device Number
01001100	4CH	Model ID
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
11110111	F7H	End of Exclusive

Address is valid only when the beginning of the block has been specified.
Reception/transmission of Dump Request cannot be turned off by MIDI switches other than Exclusive = off.

2.4.2 MU128 native dump request (1)

This message requests transmission of all parameters of the specified block of MU128 native parameters.
The output is in the same format as an MU128 native bulk dump (refer to 2.2.2).

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0010nnnn	2NH	N:Device Number
01001001	49H	Model ID
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
11110111	F7H	End of Exclusive

Details are the same as for 2.4.1 XG Bulk Dump Request.

2.4.3 MU128 native dump request (2)

This message requests transmission of all parameter values of the specified MU128 native parameter block.
The output is in the format of MU128 Native Bulk Dump (refer to 2.2.3).

11110000	F0H	Exclusive status
01000011	43H	YAMAHA ID
0010nnnn	2NH	N:Device Number
01011001	59H	Model ID
0ggggggg	GGH	Address High
0mmmmmmm	MMH	Address Mid
0lllllll	LLH	Address Low
11110111	F7H	End of Exclusive

Details are the same as for 2.4.1 XG Bulk Dump Request.

3. Realtime messages

3.1 Active sensing

a) Transmission
not transmitted.

b) Receive
Once FE has been received, failure to receive any MIDI message for an interval longer than approximately 300 msec will cause processing to be performed as if ALL SOUND OFF, ALL NOTE OFF, and RESET ALL CONTROLLERS messages were received, and the unit will reset to a condition in which FE was never received.

< Table 1 - 1 >

Parameter Base Address
Model ID = 4C [XG]

Parameter	Adress (H)	(M)	(L)	Description	Remarks
XG SYSTEM	00	00	00	System	
	00	00	7D	Drum setup Reset	Receives parameter changes only
	00	00	7E	XG System On	Receives parameter changes only
	00	00	7F	All Parameter Reset	Receives parameter changes only
INFORMATION	01	00	00	System Information	Receives dump request only
EFFECT 1	02	01	00	Effect 1 (Reverb, Chorus, Variation)	
	02	40	00	Multi EQ	
EFFECT 2	03	00	00	Insertion Effect 1	
	03	01	00	Insertion Effect 2	
DISPLAY	06	00	00	Display Letter	Receives parameter changes only
	07	00	00	Display Bit Map	Receives parameter changes only
MULTI PART	08	00	00	Multi Part 1	
				:	
	08	0F	00	Multi Part 16	
	08	10	00	Multi Part 17	
				:	
	08	1F	00	Multi Part 32	
	08	20	00	Multi Part 33	
				:	
	08	2F	00	Multi Part 48	
	08	30	00	Multi Part 49	
				:	
	08	3F	00	Multi Part 64	
MULTI PART (additional)	0A	00	00	Multi Part 1	
				:	
	0A	0F	00	Multi Part 16	
	0A	10	00	Multi Part 17	
				:	
	0A	1F	00	Multi Part 32	
	0A	20	00	Multi Part 33	
				:	
	0A	2F	00	Multi Part 48	
	0A	30	00	Multi Part 49	
				:	
	0A	3F	00	Multi Part 64	
A/D PART	10	00	00	A/D Part 1	
	10	01	00	A/D Part 2	
A/D SYSTEM	11	00	00	A/D System	
DRUM	30	0D	00	Drum Setup 1	
	31	0D	00	Drum Setup 2	
	32	0D	00	Drum Setup 3	
	33	0D	00	Drum Setup 4	
PLUGIN BOARD	70	00	00	Plugin Board	Receives parameter changes only

Address			Parameter
3n	0D	00	note number 13
3n	0E	00	note number 14
	:		:
3n	5B	00	note number 91

< Table 1 - 2 >

MIDI Parameter Change table (XG SYSTEM) [XG]

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
00 00 00	4	00 - 0F	MASTER TUNE	-102.4...0...+102.3 [cent]	00 04 00 00
01		00 - 0F		1st bit3-0→bit15-12	
02		00 - 0F		2nd bit3-0→bit11-8	
03		00 - 0F		3rd bit3-0→bit7-4	
				4th bit3-0→bit3-0	
04	1	00 - 7F	MASTER VOLUME	0...127	7F
05	1	00 - 7F	MASTER ATTENUATOR	0...127	00
06	1	28 - 58	TRANSPOSE	-24...0...+24 [semitones]	40
7D	1	N	DRUM SETUP RESET	N: Drum setup number (receive only)	--
7E	1	00	XG SYSTEM ON	00 = XG system ON (receive only)	--
7F	1	00	ALL PARAMETER RESET	00 = ON (receive only)	--
TOTAL SIZE	07				

< Table 1 - 3 >

MIDI Parameter Change table (SYSTEM INFORMATION) [XG]

Address (H)	Size (H)	Data (H)	Parameter	Description
01 00 00	E	20 - 7F	Model Name 1	32...127(ASCII CHARACTER)
:		:	:	:
0D		20 - 7F	Model Name 14	32...127 (ASCII CHARACTER)
0E	1	00 - 7F	XG Level 1	
0F	1	00 - 7F	XG Level 2	
TOTAL SIZE	10			

Transmitted in response to Dump Request. Not received.

< Table 1 - 4 >

MIDI Parameter Change table (EFFECT 1) [XG]

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 01 00	2	00 - 7F	REVERB TYPE MSB	refer to Effect Type List	01 (= HALL1)
		00 - 7F	REVERB TYPE LSB	〃	00
02	1	00 - 7F	REVERB PARAMETER 1	〃	12 (depends on reverb type)
03	1	00 - 7F	REVERB PARAMETER 2	〃	0A (〃)
04	1	00 - 7F	REVERB PARAMETER 3	〃	08 (〃)
05	1	00 - 7F	REVERB PARAMETER 4	〃	0D (〃)
06	1	00 - 7F	REVERB PARAMETER 5	〃	31 (〃)
07	1	00 - 7F	REVERB PARAMETER 6	〃	00 (〃)
08	1	00 - 7F	REVERB PARAMETER 7	〃	00 (〃)
09	1	00 - 7F	REVERB PARAMETER 8	〃	00 (〃)
0A	1	00 - 7F	REVERB PARAMETER 9	〃	00 (〃)
0B	1	00 - 7F	REVERB PARAMETER 10	〃	00 (〃)
0C	1	00 - 7F	REVERB RETURN	-∞dB...0dB...+6dB (0...96...127)	40
0D	1	01 - 7F	REVERB PAN	L63...C...R63	40
TOTAL SIZE	0E				
02 01 10	1	00 - 7F	REVERB PARAMETER 11	refer to Effect Parameter List	00 (depends on reverb type)
11	1	00 - 7F	REVERB PARAMETER 12	〃	04 (〃)
12	1	00 - 7F	REVERB PARAMETER 13	〃	32 (〃)
13	1	00 - 7F	REVERB PARAMETER 14	〃	08 (〃)
14	1	00 - 7F	REVERB PARAMETER 15	〃	40 (〃)
15	1	00 - 7F	REVERB PARAMETER 16	〃	00 (〃)
TOTAL SIZE	6				
02 01 20	2	00 - 7F	CHORUS TYPE MSB	refer to Effect Type List	41 (= CHORUS1)
		00 - 7F	CHORUS TYPE LSB	〃	00
22	1	00 - 7F	CHORUS PARAMETER 1	〃	06 (depends on chorus type)

		23	1	00 - 7F	CHORUS PARAMETER 2	〃	36 (〃)
		24	1	00 - 7F	CHORUS PARAMETER 3	〃	4D (〃)
		25	1	00 - 7F	CHORUS PARAMETER 4	〃	6A (〃)
		26	1	00 - 7F	CHORUS PARAMETER 5	〃	00 (〃)
		27	1	00 - 7F	CHORUS PARAMETER 6	〃	1C (〃)
		28	1	00 - 7F	CHORUS PARAMETER 7	〃	40 (〃)
		29	1	00 - 7F	CHORUS PARAMETER 8	〃	2E (〃)
		2A	1	00 - 7F	CHORUS PARAMETER 9	〃	40 (〃)
		2B	1	00 - 7F	CHORUS PARAMETER 10	〃	40 (〃)
		2C	1	00 - 7F	CHORUS RETURN	-∞dB...0dB...+6dB (0...96...127)	40
		2D	1	01 - 7F	CHORUS PAN	L63...C...R63 (1...64...127)	40
		2E	1	00 - 7F	SEND CHORUS TO REVERB	-∞dB...0dB...+6dB (0...96...127)	00
TOTAL SIZE			0F				
02	01	30	1	00 - 7F	CHORUS PARAMETER 11	refer to Effect Parameter List	2E (depends on chorus type)
		31	1	00 - 7F	CHORUS PARAMETER 12	〃	40 (〃)
		32	1	00 - 7F	CHORUS PARAMETER 13	〃	0A (〃)
		33	1	00 - 7F	CHORUS PARAMETER 14	〃	00 (〃)
		34	1	00 - 7F	CHORUS PARAMETER 15	〃	00 (〃)
		35	1	00 - 7F	CHORUS PARAMETER 16	〃	00 (〃)
TOTAL SIZE			6				
02	01	40	2	00 - 7F	VARIATION TYPE MSB	refer to Effect Type List	05 (= DELAY L, C, R)
				00 - 7F	VARIATION TYPE LSB	〃	00
		42	2	00 - 7F	VARIATION PARAMETER 1 MSB	〃	1A (depends on variation type)
				00 - 7F	VARIATION PARAMETER 1 LSB	〃	05 (〃)
		44	2	00 - 7F	VARIATION PARAMETER 2 MSB	〃	0D (〃)
				00 - 7F	VARIATION PARAMETER 2 LSB	〃	03 (〃)
		46	2	00 - 7F	VARIATION PARAMETER 3 MSB	〃	27 (〃)
				00 - 7F	VARIATION PARAMETER 3 LSB	〃	08 (〃)
		48	2	00 - 7F	VARIATION PARAMETER 4 MSB	〃	27 (〃)
				00 - 7F	VARIATION PARAMETER 4 LSB	〃	08 (〃)
		4A	2	00 - 7F	VARIATION PARAMETER 5 MSB	〃	00 (〃)
				00 - 7F	VARIATION PARAMETER 5 LSB	〃	4A (〃)
		4C	2	00 - 7F	VARIATION PARAMETER 6 MSB	〃	00 (〃)
				00 - 7F	VARIATION PARAMETER 6 LSB	〃	64 (〃)
		4E	2	00 - 7F	VARIATION PARAMETER 7 MSB	〃	00 (〃)
				00 - 7F	VARIATION PARAMETER 7 LSB	〃	0A (〃)
		50	2	00 - 7F	VARIATION PARAMETER 8 MSB	〃	00 (〃)
				00 - 7F	VARIATION PARAMETER 8 LSB	〃	00 (〃)
		52	2	00 - 7F	VARIATION PARAMETER 9 MSB	〃	00 (〃)
				00 - 7F	VARIATION PARAMETER 9 LSB	〃	00 (〃)
		54	2	00 - 7F	VARIATION PARAMETER 10 MSB	〃	00 (〃)
				00 - 7F	VARIATION PARAMETER 10 LSB	〃	20 (〃)
		56	1	00 - 7F	VARIATION RETURN	-∞dB...0dB...+6dB (0...96...127)	40
		57	1	01 - 7F	VARIATION PAN	L63...C...R63 (1...64...127)	40
		58	1	00 - 7F	SEND VARIATION TO REVERB	-∞dB...0dB...+6dB (0...96...127)	00
		59	1	00 - 7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB (0...96...127)	00
		5A	1	00 - 01	VARIATION CONNECTION	INSERTION, SYSTEM	00
		5B	1	00 - 7F	VARIATION PART NUMBER	Part1...64 (0...63) AD1, AD2 (64, 65) OFF (127)	7F
		5C	1	00 - 7F	MW VARIATION CONTROL DEPTH	-64...0...+63	40
		5D	1	00 - 7F	BEND VARIATION CONTROL DEPTH	-64...0...+63	40
		5E	1	00 - 7F	CAT VARIATION CONTROL DEPTH	-64...0...+63	40
		5F	1	00 - 7F	AC1 VARIATION CONTROL DEPTH	-64...0...+63	40
		60	1	00 - 7F	AC2 VARIATION CONTROL DEPTH	-64...0...+63	40
TOTAL SIZE			21				
02	01	70	1	00 - 7F	VARIATION PARAMETER 11	refer to Effect Parameter List	00 (depends on variation type)
		71	1	00 - 7F	VARIATION PARAMETER 12	〃	3C (〃)
		72	1	00 - 7F	VARIATION PARAMETER 13	〃	1C (〃)
		73	1	00 - 7F	VARIATION PARAMETER 14	〃	40 (〃)

74	1	00 - 7F	VARIATION PARAMETER 15	〃	2E (〃)
75	1	00 - 7F	VARIATION PARAMETER 16	〃	40 (〃)
TOTAL SIZE	6				

< Table 1 - 5 >

MIDI Parameter Change table (MULTI EQ) [XG]

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 40 00	1	00 - 04	EQ TYPE	flat, jazz, pops, rock, classic	00
01	1	34 - 4C	EQ GAIN1	-12...0...+12 [dB]	40 (depends on EQ type)
02	1	04 - 28	EQ FREQUENCY1	32...2.0k [Hz]	0C (〃)
03	1	01 - 78	EQ Q1	0.1...12.0	07 (〃)
04	1	00 - 01	EQ SHAPE1	shelving, peaking	00 (〃)
05	1	34 - 4C	EQ GAIN2	-12...0...+12 [dB]	40 (〃)
06	1	0E - 36	EQ FREQUENCY2	100...10.0k [Hz]	1C (〃)
07	1	01 - 78	EQ Q2	0.1...12.0	07 (〃)
08	1		NOT USED		--
09	1	34 - 4C	EQ GAIN3	-12...0...+12 [dB]	40 (〃)
0A	1	0E - 36	EQ FREQUENCY3	100...10.0k [Hz]	22 (〃)
0B	1	01 - 78	EQ Q3	0.1...12.0	07 (〃)
0C	1		NOT USED		--
0D	1	34 - 4C	EQ GAIN4	-12...0...+12 [dB]	40 (〃)
0E	1	0E - 36	EQ FREQUENCY4	100...10.0k [Hz]	2E (〃)
0F	1	01 - 78	EQ Q4	0.1...12.0	07 (〃)
10	1		NOT USED		--
11	1	34 - 4C	EQ GAIN5	-12...0...+12 [dB]	40 (〃)
12	1	1C - 3A	EQ FREQUENCY5	0.5k...16.0k [Hz]	34 (〃)
13	1	01 - 78	EQ Q5	0.1...12.0	07 (〃)
14	1	00 - 01	EQ SHAPE5	shelving, peaking	00 (〃)
TOTAL SIZE	15				

< Table 1 - 6 >

MIDI Parameter Change table (EFFECT 2) [XG]

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
03 00 00	2	00 - 7F	INSERTION EFFECT1 TYPE MSB	refer to Effect Type List	49 (= DISTORTION)
		00 - 7F	INSERTION EFFECT1 TYPE LSB	〃	00
02	1	00 - 7F	INSERTION EFFECT1 PARAMETER1	〃	28 (depends on insertion effect1 type)
03	1	00 - 7F	INSERTION EFFECT1 PARAMETER2	〃	14 (〃)
04	1	00 - 7F	INSERTION EFFECT1 PARAMETER3	〃	48 (〃)
05	1	00 - 7F	INSERTION EFFECT1 PARAMETER4	〃	35 (〃)
06	1	00 - 7F	INSERTION EFFECT1 PARAMETER5	〃	40 (〃)
07	1	00 - 7F	INSERTION EFFECT1 PARAMETER6	〃	00 (〃)
08	1	00 - 7F	INSERTION EFFECT1 PARAMETER7	〃	2B (〃)
09	1	00 - 7F	INSERTION EFFECT1 PARAMETER8	〃	4A (〃)
0A	1	00 - 7F	INSERTION EFFECT1 PARAMETER9	〃	0A (〃)
0B	1	00 - 7F	INSERTION EFFECT1 PARAMETER10	〃	7F (〃)
0C	1	00 - 7F	INSERTION EFFECT1 PART NUMBER	Part1...64 (0...63) AD1, AD2 (64, 65) OFF (127)	7F
0D	1	00 - 7F	MW INSERTION CONTROL DEPTH	-64...0...+63	40
0E	1	00 - 7F	BEND INSERTION CONTROL DEPTH	-64...0...+63	40
0F	1	00 - 7F	CAT INSERTION CONTROL DEPTH	-64...0...+63	40
10	1	00 - 7F	AC1 INSERTION CONTROL DEPTH	-64...0...+63	40
11	1	00 - 7F	AC2 INSERTION CONTROL DEPTH	-64...0...+63	40
TOTAL SIZE	12				
20	1	00 - 7F	INSERTION EFFECT1 PARAMETER11	refer to Effect Parameter List	78 (depends on insertion effect1 type)
21	1	00 - 7F	INSERTION EFFECT1 PARAMETER12	〃	00 (〃)
22	1	00 - 7F	INSERTION EFFECT1 PARAMETER13	〃	00 (〃)
23	1	00 - 7F	INSERTION EFFECT1 PARAMETER14	〃	00 (〃)
24	1	00 - 7F	INSERTION EFFECT1 PARAMETER15	〃	00 (〃)

		25	1	00 - 7F	INSERTION EFFECT1 PARAMETER16	〃	00 (〃)
TOTAL SIZE			6				

		30	2	00 - 7F	INSERTION EFFECT1 PARAMETER1 MSB	refer to Effect Parameter List	00 (depends on insertion effect1 type)
				00 - 7F	INSERTION EFFECT1 PARAMETER1 LSB	〃	28 (〃)
		32	2	00 - 7F	INSERTION EFFECT1 PARAMETER2 MSB	〃	00 (〃)
				00 - 7F	INSERTION EFFECT1 PARAMETER2 LSB	〃	14 (〃)
		34	2	00 - 7F	INSERTION EFFECT1 PARAMETER3 MSB	〃	00 (〃)
				00 - 7F	INSERTION EFFECT1 PARAMETER3 LSB	〃	48 (〃)
		36	2	00 - 7F	INSERTION EFFECT1 PARAMETER4 MSB	〃	00 (〃)
				00 - 7F	INSERTION EFFECT1 PARAMETER4 LSB	〃	35 (〃)
		38	2	00 - 7F	INSERTION EFFECT1 PARAMETER5 MSB	〃	00 (〃)
				00 - 7F	INSERTION EFFECT1 PARAMETER5 LSB	〃	40 (〃)
		3A	2	00 - 7F	INSERTION EFFECT1 PARAMETER6 MSB	〃	00 (〃)
				00 - 7F	INSERTION EFFECT1 PARAMETER6 LSB	〃	00 (〃)
		3C	2	00 - 7F	INSERTION EFFECT1 PARAMETER7 MSB	〃	00 (〃)
				00 - 7F	INSERTION EFFECT1 PARAMETER7 LSB	〃	2B (〃)
		3E	2	00 - 7F	INSERTION EFFECT1 PARAMETER8 MSB	〃	00 (〃)
				00 - 7F	INSERTION EFFECT1 PARAMETER8 LSB	〃	4A (〃)
		40	2	00 - 7F	INSERTION EFFECT1 PARAMETER9 MSB	〃	00 (〃)
				00 - 7F	INSERTION EFFECT1 PARAMETER9 LSB	〃	0A (〃)
		42	2	00 - 7F	INSERTION EFFECT1 PARAMETER10 MSB	〃	00(〃)
				00 - 7F	INSERTION EFFECT1 PARAMETER10 LSB	〃	7F (〃)
TOTAL SIZE			14				

When using an EFFECT TYPE which does not require the MSB, parameters of addresses 02~0B are received, and parameters of addresses 30~42 are not received.
When using an EFFECT TYPE which requires the MSB, parameters of addresses 30~42 are received, and parameters of addresses 02~0B are not received.
Bulk data which includes the EFFECT TYPE is always transmitted with the parameters of addresses 02~0B, but in the case of an EFFECT TYPE which requires the MSB, parameters of addresses 02~0B are not received even for bulk reception.
The EFFECT TYPE that require MSB are: DELAY L,C,R, DELAY L,R, ECHO, CROSS DELAY.

03	01	00	2	00 - 7F	INSERTION EFFECT2 TYPE MSB	refer to Effect Type List	49 (= DISTORTION)
				00 - 7F	INSERTION EFFECT2 TYPE LSB	〃	00
		02	1	00 - 7F	INSERTION EFFECT2 PARAMETER1	〃	28(depends on insertion effect2 type)
		03	1	00 - 7F	INSERTION EFFECT2 PARAMETER2	〃	14 (〃)
		04	1	00 - 7F	INSERTION EFFECT2 PARAMETER3	〃	48 (〃)
		05	1	00 - 7F	INSERTION EFFECT2 PARAMETER4	〃	35 (〃)
		06	1	00 - 7F	INSERTION EFFECT2 PARAMETER5	〃	40 (〃)
		07	1	00 - 7F	INSERTION EFFECT2 PARAMETER6	〃	00 (〃)
		08	1	00 - 7F	INSERTION EFFECT2 PARAMETER7	〃	2B (〃)
		09	1	00 - 7F	INSERTION EFFECT2 PARAMETER8	〃	4A (〃)
		0A	1	00 - 7F	INSERTION EFFECT2 PARAMETER9	〃	0A (〃)
		0B	1	00 - 7F	INSERTION EFFECT2 PARAMETER10	〃	7F (〃)
		0C	1	00 - 7F	INSERTION EFFECT2 PART NUMBER	Part1...64 (0...63) AD1, AD2 (64, 65) OFF (127)	7F
		0D	1	00 - 7F	MW INSERTION CONTROL DEPTH	-64...0...+63	40
		0E	1	00 - 7F	BEND INSERTION CONTROL DEPTH	-64...0...+63	40
		0F	1	00 - 7F	CAT INSERTION CONTROL DEPTH	-64...0...+63	40
		10	1	00 - 7F	AC1 INSERTION CONTROL DEPTH	-64...0...+63	40
		11	1	00 - 7F	AC2 INSERTION CONTROL DEPTH	-64...0...+63	40
TOTAL SIZE			12				

		20	1	00 - 7F	INSERTION EFFECT2 PARAMETER11	refer to Effect Parameter List	78 (depends on insertion effect2 type)
		21	1	00 - 7F	INSERTION EFFECT2 PARAMETER12	〃	00 (〃)
		22	1	00 - 7F	INSERTION EFFECT2 PARAMETER13	〃	00 (〃)
		23	1	00 - 7F	INSERTION EFFECT2 PARAMETER14	〃	00 (〃)
		24	1	00 - 7F	INSERTION EFFECT2 PARAMETER15	〃	00 (〃)
		25	1	00 - 7F	INSERTION EFFECT2 PARAMETER16	〃	00 (〃)
TOTAL SIZE			6				

Address (H)	Size	Data	Parameter	Description	Default value
30	2	00 - 7F	INSERTION EFFECT2 PARAMETER1 MSB	refer to Effect Parameter List	00 (depends on insertion effect2 type)
		00 - 7F	INSERTION EFFECT2 PARAMETER1 LSB	″	28 (″)
32	2	00 - 7F	INSERTION EFFECT2 PARAMETER2 MSB	″	00 (″)
		00 - 7F	INSERTION EFFECT2 PARAMETER2 LSB	″	14 (″)
34	2	00 - 7F	INSERTION EFFECT2 PARAMETER3 MSB	″	00 (″)
		00 - 7F	INSERTION EFFECT2 PARAMETER3 LSB	″	48 (″)
36	2	00 - 7F	INSERTION EFFECT2 PARAMETER4 MSB	″	00 (″)
		00 - 7F	INSERTION EFFECT2 PARAMETER4 LSB	″	35 (″)
38	2	00 - 7F	INSERTION EFFECT2 PARAMETER5 MSB	″	00 (″)
		00 - 7F	INSERTION EFFECT2 PARAMETER5 LSB	″	40 (″)
3A	2	00 - 7F	INSERTION EFFECT2 PARAMETER6 MSB	″	00 (″)
		00 - 7F	INSERTION EFFECT2 PARAMETER6 LSB	″	00 (″)
3C	2	00 - 7F	INSERTION EFFECT2 PARAMETER7 MSB	″	00 (″)
		00 - 7F	INSERTION EFFECT2 PARAMETER7 LSB	″	2B (″)
3E	2	00 - 7F	INSERTION EFFECT2 PARAMETER8 MSB	″	00 (″)
		00 - 7F	INSERTION EFFECT2 PARAMETER8 LSB	″	4A (″)
40	2	00 - 7F	INSERTION EFFECT2 PARAMETER9 MSB	″	00 (″)
		00 - 7F	INSERTION EFFECT2 PARAMETER9 LSB	″	0A (″)
42	1	00 - 7F	INSERTION EFFECT2 PARAMETER10 MSB	″	00 (″)
		00 - 7F	INSERTION EFFECT2 PARAMETER10 LSB	″	7F (″)
TOTAL SIZE	14				

When using an EFFECT TYPE which does not require the MSB, parameters of addresses 02~0B are received, and parameters of addresses 30~42 are not received.
When using an EFFECT TYPE which requires the MSB, parameters of addresses 30~42 are received, and parameters of addresses 02~0B are not received.
Transmission of bulk data which includes EFFECT TYPE data will always include the parameters of addresses 02~0B, but in the case of an EFFECT TYPE which does not require the MSB, parameters of addresses 02~0B will not be received even in bulk reception.
The EFFECT TYPE that require MSB are: DELAY L,C,R, DELAY L,R, ECHO, CROSS DELAY.

< Table 1 - 7 >

MIDI Parameter Change table (DISPLAY DATA) [XG]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
06	00	00	20	20 - 7F	DISPLAY LETTER Data1	32...127(ASCII CHARACTER)	--
		:			:	:	:
		1F			DISPLAY LETTER Data32	32...127(ASCII CHARACTER)	--
TOTAL SIZE			20				
07	00	00	30	00 - 7F	DISPLAY BITMAP Data1*	0...127	--
		:			:	:	:
		2F			DISPLAY BITMAP Data48	0...127	--
TOTAL SIZE			30				

* The relation between DISPLAY BITMAP data and the display screen

Seven pixels horizontally are one byte of data.
Set a bit to 1 to display the corresponding pixel, and set a bit to 0 to turn it off.
This data is mapped to the screen as follows.

	b7 b6 b5 b4 b3 b2 b1 b0		b7 b6 b5 b4 b3 b2 b1 b0		b7 b6 b5 b4 b3 b2 b1 b0 ('b' stands for 'bit')
Data1	0 * * * * * * *	Data17	0 * * * * * * *	Data33	0 * * - - - - -
Data2		Data18		Data34	
Data3		Data19		Data35	
Data4		Data20		Data36	
Data5		Data21		Data37	
Data6		Data22		Data38	
Data7		Data23		Data39	
Data8		Data24		Data40	
Data9		Data25		Data41	
Data10		Data26		Data42	
Data11		Data27		Data43	
Data12		Data28		Data44	
Data13		Data29		Data45	

Data14	Data30	Data46
Data15	Data31	Data47
Data16	Data32	Data48

For Data33~Data48, only bit 6 and bit 5 are used.

Specific individual pixels of the bitmap data can also be received. In this case, other pixels will retain their previous state.
DISPLAY DATA parameter changes can be transmitted continuously from a specified location.

< Table 1 - 8 >

MIDI Parameter Change table (MULTI PART) [XG]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
08	nn	00	1	00 - 40	NOT USED		--
	nn	01	1	00 - 7F	BANK SELECT MSB	0...127	part10,26 = 7F other parts = 0
	nn	02	1	00 - 7F	BANK SELECT LSB	0...127	00
	nn	03	1	00 - 7F	PROGRAM NUMBER	1...128	00
	nn	04	1	00-3F, 7F	Rcv CHANNEL	A1...A16, B1...B16, C1...C16, D1...D16, OFF	Part No.
	nn	05	1	00 - 01	MONO/POLY MODE	MONO , POLY	01
	nn	06	1	00 - 02	SAME NOTE NUMBER KEY ON ASSIGN	SINGLE, MULTI, INST(for DRUM)	01
	nn	07	1	00 - 05	PART MODE	NORMAL, DRUM, DRUMS1...4	Part10 = 2, Part26 = 4 Part42, 58 = 1 other parts = 0
	nn	08	1	28 - 58	NOTE SHIFT	-24...0...+24 [semitones]	40
	nn	09	2	00 - 0F	DETUNE	-12.8...0...+12.7 [Hz]	08 00
	nn	0A		00 - 0F		1st bit3-0→bit7-4 2nd bit3-0→bit3-0	
	nn	0B	1	00 - 7F	VOLUME	0...127	64
	nn	0C	1	00 - 7F	VELOCITY SENSE DEPTH	0...127	40
	nn	0D	1	00 - 7F	VELOCITY SENSE OFFSET	0...127	40
	nn	0E	1	00 - 7F	PAN	RND, L63...C...R63	40
	nn	0F	1	00 - 7F	NOTE LIMIT LOW	C-2...G8	00
	nn	10	1	00 - 7F	NOTE LIMIT HIGH	C-2...G8	7F
	nn	11	1	00 - 7F	DRY LEVEL	0...127	7F
	nn	12	1	00 - 7F	CHORUS SEND	0...127	00
	nn	13	1	00 - 7F	REVERB SEND	0...127	28
	nn	14	1	00 - 7F	VARIATION SEND	0...127	00
	nn	15	1	00 - 7F	VIBRATO RATE	-64...0...+63	40
	nn	16	1	00 - 7F	VIBRATO DEPTH	-64...0...+63	40
	nn	17	1	00 - 7F	VIBRATO DELAY	-64...0...+63	40
	nn	18	1	00 - 7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...+63	40
	nn	19	1	00 - 7F	LOW PASS FILTER RESONANCE	-64...0...+63	40
	nn	1A	1	00 - 7F	EG ATTACK TIME	-64...0...+63	40
	nn	1B	1	00 - 7F	EG DECAY TIME	-64...0...+63	40
	nn	1C	1	00 - 7F	EG RELEASE TIME	-64...0...+63	40
	nn	1D	1	28 - 58	MW PITCH CONTROL	-24...0...+24 [semitones]	40
	nn	1E	1	00 - 7F	MW LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40
	nn	1F	1	00 - 7F	MW AMPLITUDE CONTROL	-100...0...+100 [%]	40
	nn	20	1	00 - 7F	MW LFO PMOD DEPTH	0...127	0A
	nn	21	1	00 - 7F	MW LFO FMOD DEPTH	0...127	00
	nn	22	1	00 - 7F	MW LFO AMOD DEPTH	0...127	00
	nn	23	1	28 - 58	BEND PITCH CONTROL	-24...0...+24 [semitones]	42
	nn	24	1	00 - 7F	BEND LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40
	nn	25	1	00 - 7F	BEND AMPLITUDE CONTROL	-100...0...+100 [%]	40
	nn	26	1	00 - 7F	BEND LFO PMOD DEPTH	0...127	00
	nn	27	1	00 - 7F	BEND LFO FMOD DEPTH	0...127	00
	nn	28	1	00 - 7F	BEND LFO AMOD DEPTH	0...127	00
TOTAL SIZE			29				

nn	30	1	00 - 01	Rcv PITCH BEND	OFF, ON	01
nn	31	1	00 - 01	Rcv CH AFTER TOUCH (CAT)	OFF, ON	01
nn	32	1	00 - 01	Rcv PROGRAM CHANGE	OFF, ON	01
nn	33	1	00 - 01	Rcv CONTROL CHANGE	OFF, ON	01
nn	34	1	00 - 01	Rcv POLY AFTER TOUCH (PAT)	OFF, ON	01
nn	35	1	00 - 01	Rcv NOTE MESSAGE	OFF, ON	01
nn	36	1	00 - 01	Rcv RPN	OFF, ON	01
nn	37	1	00 - 01	Rcv NRPN	OFF, ON	XGmode = 01, GMmode = 00
nn	38	1	00 - 01	Rcv MODURATION	OFF, ON	01
nn	39	1	00 - 01	Rcv VOLUME	OFF, ON	01
nn	3A	1	00 - 01	Rcv PAN	OFF, ON	01
nn	3B	1	00 - 01	Rcv EXPRESSION	OFF, ON	01
nn	3C	1	00 - 01	Rcv HOLD1	OFF, ON	01
nn	3D	1	00 - 01	Rcv PORTAMENTO	OFF, ON	01
nn	3E	1	00 - 01	Rcv SOSTENUTO	OFF, ON	01
nn	3F	1	00 - 01	Rcv SOFT PEDAL	OFF, ON	01
nn	40	1	00 - 01	Rcv BANK SELECT	OFF, ON	XGmode = 01, GMmode = 00
nn	41	1	00 - 7F	SCALE TUNING C	-64...0...+63 [cent]	40
nn	42	1	00 - 7F	SCALE TUNING C#	-64...0...+63 [cent]	40
nn	43	1	00 - 7F	SCALE TUNING D	-64...0...+63 [cent]	40
nn	44	1	00 - 7F	SCALE TUNING D#	-64...0...+63 [cent]	40
nn	45	1	00 - 7F	SCALE TUNING E	-64...0...+63 [cent]	40
nn	46	1	00 - 7F	SCALE TUNING F	-64...0...+63 [cent]	40
nn	47	1	00 - 7F	SCALE TUNING F#	-64...0...+63 [cent]	40
nn	48	1	00 - 7F	SCALE TUNING G	-64...0...+63 [cent]	40
nn	49	1	00 - 7F	SCALE TUNING G#	-64...0...+63 [cent]	40
nn	4A	1	00 - 7F	SCALE TUNING A	-64...0...+63 [cent]	40
nn	4B	1	00 - 7F	SCALE TUNING A#	-64...0...+63 [cent]	40
nn	4C	1	00 - 7F	SCALE TUNING B	-64...0...+63 [cent]	40
nn	4D	1	28 - 58	CAT PITCH CONTROL	-24...0...+24 [semitones]	40
nn	4E	1	00 - 7F	CAT LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40
nn	4F	1	00 - 7F	CAT AMPLITUDE CONTROL	-100...0...+100 [%]	40
nn	50	1	00 - 7F	CAT LFO PMOD DEPTH	0...127	00
nn	51	1	00 - 7F	CAT LFO FMOD DEPTH	0...127	00
nn	52	1	00 - 7F	CAT LFO AMOD DEPTH	0...127	00
nn	53	1	28 - 58	PAT PITCH CONTROL	-24...0...+24 [semitones]	40
nn	54	1	00 - 7F	PAT LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40
nn	55	1	00 - 7F	PAT AMPLITUDE CONTROL	-100...0...+100 [%]	40
nn	56	1	00 - 7F	PAT LFO PMOD DEPTH	0...127	00
nn	57	1	00 - 7F	PAT LFO FMOD DEPTH	0...127	00
nn	58	1	00 - 7F	PAT LFO AMOD DEPTH	0...127	00
nn	59	1	00 - 5F	AC1 CONTROLLER NUMBER	0...95	10
nn	5A	1	28 - 58	AC1 PITCH CONTROL	-24...0...+24 [semitones]	40
nn	5B	1	00 - 7F	AC1 LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40
nn	5C	1	00 - 7F	AC1 AMPLITUDE CONTROL	-100...0...+100 [%]	40
nn	5D	1	00 - 7F	AC1 LFO PMOD DEPTH	0...127	00
nn	5E	1	00 - 7F	AC1 LFO FMOD DEPTH	0...127	00
nn	5F	1	00 - 7F	AC1 LFO AMOD DEPTH	0...127 (Not valid for VL)	00
nn	60	1	00 - 5F	AC2 CONTROLLER NUMBER	0...95 (Not valid for VL)	11
nn	61	1	28 - 58	AC2 PITCH CONTROL	-24...0...+24 [semitones]	40
nn	62	1	00 - 7F	AC2 LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40
nn	63	1	00 - 7F	AC2 AMPLITUDE CONTROL	-100...0...+100 [%]	40
nn	64	1	00 - 7F	AC2 LFO PMOD DEPTH	0...127	00
nn	65	1	00 - 7F	AC2 LFO FMOD DEPTH	0...127	00
nn	66	1	00 - 7F	AC2 LFO AMOD DEPTH	0...127	00
nn	67	1	00 - 01	PORTAMENTO SWITCH	OFF, ON	00
nn	68	1	00 - 7F	PORTAMENTO TIME	0...127	00
nn	69	1	00 - 7F	PITCH EG INITIAL LEVEL	-64...0...+63	40
nn	6A	1	00 - 7F	PITCH EG ATTACK TIME	-64...0...+63	40
nn	6B	1	00 - 7F	PITCH EG RELEASE LEVEL	-64...0...+63	40
nn	6C	1	00 - 7F	PITCH EG RELEASE TIME	-64...0...+63	40
nn	6D	1	01 - 7F	VELOCITY LIMIT LOW	1...127	01

	nn	6E	1	01 - 7F	VELOCITY LIMIT HIGH	1...127	7F
TOTAL SIZE			3F				

	nn	70	1		NOT USED		--
	nn	71	1		NOT USED		--
	nn	72	1	00 - 7F	EQ BASS GAIN	-12 - +12 [dB]	40
	nn	73	1	00 - 7F	EQ TREBLE GAIN	-12 - +12 [dB]	40
TOTAL SIZE			4				

	nn	74	1		NOT USED		--
	nn	75	1		NOT USED		--
	nn	76	1	04 - 28	EQ BASS FREQUENCY	32...2.0k [Hz]	0C
	nn	77	1	1C - 3A	EQ TREBLE FREQUENCY	500...16.0k [Hz]	36
	nn	78	1		NOT USED		--
	nn	79	1		NOT USED		--
	nn	7A	1		NOT USED		--
	nn	7B	1		NOT USED		--
	nn	7C	1		NOT USED		--
	nn	7D	1		NOT USED		--
	nn	7E	1		NOT USED		--
	nn	7F	1		NOT USED		--
TOTAL SIZE			0C				

0A	nn	20	1	00 - 7F	HIGH PASS FILTER CUTOFF FREQUENCY	-64...0...+63	40
	nn	21	1		NOT USED		--
TOTAL SIZE			2				

nn = PART NUMBER

In the case of a DRUM PART, the following parameters will have no effect.

- BANK SELECT LSB
- MONO/POLY MODE
- SCALE TUNING
- PORTAMENTO
- PITCH EG
- FILTER MODURATION DEPTH (FMOD DEPTH)
- AMPLITUDE MODURATION DEPTH (AMOD DEPTH)

< Table 1 - 9 >

MIDI Parameter Change table (A/D PART) [XG]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
10	0n	00	1	00 - 01	INPUT GAIN	MIC , LINE	00
		01	1	00 - 7F	BANK SELECT MSB	0...127	00
		02	1	00 - 7F	BANK SELECT LSB	0...127	00
		03	1	00 - 7F	PROGRAM NUMBER	1...128	00
		04	1	00-3F, 7F	Rcv CHANNEL	A1...A16, B1...B16 C1...C16, D1...D16, OFF	7F
		05	1		NOT USED		--
		06	1		NOT USED		--
		07	1		NOT USED		--
		08	1		NOT USED		--
		09	1		NOT USED		--
		0A	1		NOT USED		--
		0B	1	00 - 7F	VOLUME	0...127	00
		0C	1		NOT USED		--
		0D	1		NOT USED		--
		0E	1	01 - 7F	PAN	L63...C...R63	40
		0F	1		NOT USED		--
		10	1		NOT USED		--
		11	1	00 - 7F	DRY LEVEL	0...127	7F
		12	1	00 - 7F	CHORUS SEND	0...127	00

		13	1	00 - 7F	REVERB SEND	0...127	00
		14	1	00 - 7F	VARIATION SEND	0...127	00
TOTAL SIZE			15				

10	0n	30	1		NOT USED		--
		31	1		NOT USED		--
		32	1	00 - 01	Rcv PROGRAM CHANGE	OFF , ON	00
		33	1	00 - 01	Rcv CONTROL CHANGE	OFF , ON	01
		34	1		NOT USED		--
		35	1	00 - 01	MUTE	OFF , ON	01
		36	1		NOT USED		--
		37	1		NOT USED		--
		38	1		NOT USED		--
		39	1	00 - 01	Rcv VOLUME	OFF , ON	01
		3A	1	00 - 01	Rcv PAN	OFF , ON	01
		3B	1	00 - 01	Rcv EXPRESSION	OFF , ON	01
		3C	1		NOT USED		--
		3D	1		NOT USED		--
		3E	1		NOT USED		--
		3F	1		NOT USED		--
		40	1	00 - 01	Rcv BANK SELECT	OFF , ON	00
		41	1		NOT USED		--
		42	1		NOT USED		--
		43	1		NOT USED		--
		44	1		NOT USED		--
		45	1		NOT USED		--
		46	1		NOT USED		--
		47	1		NOT USED		--
		48	1		NOT USED		--
		49	1		NOT USED		--
		4A	1		NOT USED		--
		4B	1		NOT USED		--
		4C	1		NOT USED		--
		4D	1		NOT USED		--
		4E	1		NOT USED		--
		4F	1		NOT USED		--
		50	1		NOT USED		--
		51	1		NOT USED		--
		52	1		NOT USED		--
		53	1		NOT USED		--
		54	1		NOT USED		--
		55	1		NOT USED		--
		56	1		NOT USED		--
		57	1		NOT USED		--
		58	1		NOT USED		--
		59	1	00 - 5F	AC1 CONTROLLER NUMBER	0...95	10
		5A	1		NOT USED		--
		5B	1		NOT USED		--
		5C	1		NOT USED		--
		5D	1		NOT USED		--
		5E	1		NOT USED		--
		5F	1		NOT USED		--
		60	1	00 - 5F	AC2 CONTROLLER NUMBER	0...95	11
TOTAL SIZE			31				

n: A/D Part number (0 - 1)

< Table 1 - 10 >

MIDI Parameter Change table (A/D System) [XG]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
11	00	00	1	00 - 01	A/D1, 2 MONO/STEREO MODE	MONO/STEREO	00
TOTAL SIZE			1				

< Table 1 - 11 >

MIDI Parameter Change table (DRUM SETUP)

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
3n	rr	00	1	00 - 7F	PITCH COARSE	-64...0...+63	40
		01	1	00 - 7F	PITCH FINE	-64...0...+63 [cent]	40
		02	1	00 - 7F	LEVEL	0...127	depend on the note
		03	1	00 - 7F	ALTERNATE GROUP	OFF, 1...127	〃
		04	1	00 - 7F	PAN	RND, L63...C...R63	〃
		05	1	00 - 7F	REVERB SEND	0...127	〃
		06	1	00 - 7F	CHORUS SEND	0...127	〃
		07	1	00 - 7F	VARIATION SEND	0...127	7F
		08	1	00 - 01	KEY ASSIGN	SINGLE, MULTI	00
		09	1	00 - 01	Rcv NOTE OFF	OFF, ON	depend on the note
		0A	1	00 - 01	Rcv NOTE ON	OFF, ON	01
		0B	1	00 - 7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...63	40
		0C	1	00 - 7F	LOW PASS FILTER RESONANCE	-64...0...63	40
		0D	1	00 - 7F	EG ATTACK RATE	-64...0...63	40
		0E	1	00 - 7F	EG DECAY1 RATE	-64...0...63	40
		0F	1	00 - 7F	EG DECAY2 RATE	-64...0...63	40
TOTAL SIZE			10				
3n	rr	20	1	00 - 7F	EQ BASS GAIN	-12 - +12 [dB]	40
		21	1	00 - 7F	EQ TREBLE GAIN	-12 - +12 [dB]	40
		22	1		NOT USED		--
		23	1		NOT USED		--
		24	1	04 - 28	EQ BASS FREQUENCY	32...2.0k [Hz]	0C
		25	1	1C - 3A	EQ TREBLE FREQUENCY	500...16.0k [Hz]	36
		26	1		NOT USED		--
		27	1		NOT USED		--
		28	1		NOT USED		--
		29	1		NOT USED		--
		2A	1		NOT USED		--
		2B	1		NOT USED		--
		2C	1		NOT USED		--
		2D	1		NOT USED		--
TOTAL SIZE			0E				
3n	rr	50	1	00 - 7F	HIGH PASS FILTER CUTOFF FREQUENCY	-64...0...63	40
		51	1		NOT USED		--
TOTAL SIZE			2				
3n	rr	60	1	30 - 50	VELOCITY SENSE PITCH	-16...0...16	depend on the note
		61	1	30 - 50	VELOCITY SENSE LPF CUTOFF	-16...0...16	〃
TOTAL SIZE			2				

n:Drum Setup Number (0 - 3)
rr:note number (0D - 5B)

In the following cases, the MU128 will initialize all Drum Setups.

XG SYSTEM ON received
GM SYSTEM ON received
DRUM SETUP RESET received (when in XG mode)

[Note]

When a part to which a Drum Setup is assigned receives a program change, the assigned Drum Setup will be initialized.
If the same Drum Setup is assigned to two or more parts, changes in Drum Setup parameters (including program changes) will apply to all parts to which it is assigned.

< Table 1 - 12 >

MIDI Parameter Change table (PLUGIN BOARD) [XG]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
70	tt	nn	1	00 - 0F, 7F	Part Assign	PART 1…16, OFF	00
TOTAL SIZE			1				
71	tt	mm	1	00 - 0F, 7F	Note Filter	A1…A16, OFF	7F
TOTAL SIZE			1				

tt: board type (00: PLG100-VL, 01: PLG100-SG, 02: PLG100-DX...)
nn: serial number
mm: part number (00-0F)

MIDI Parameter Change settings are only received when the corresponding plug-in board is installed.

< Table 2 - 1 >

Parmeter Bass Address
Model ID = 49 [MU native]

Parameter	Adress (H)	(M)	(L)	Description	Remarks
MU100 SYSTEM	00	00	00	System	
REMOTE SWITCH	0A	00	00	Remote Switch	Receives parameter changes only
MU80 INTERNAL PERFORMANCE	30	00	00	#1 Common	Receives bulk dump only
		:		:	
	30	63	00	#100 Common	
	31	00	00	#1 Part1	
		:		:	
	31	63	00	#100 Part1	
	32	00	00	#1 Part2	
		:		:	
	32	63	00	#100 Part2	
	33	00	00	#1 Part3	
		:		:	
	33	63	00	#100 Part3	
	34	00	00	#1 Part4	
		:		:	
	34	63	00	#100 Part4	

MU80 Performance Common INT

Address (H)			Parameter
30	pp	00	System
	pp	20	Effect
	pp	70	EQ

pp:Performance#

< Table 2 - 2 >

MIDI Parameter Change table (MU128 SYSTEM) [MU native]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
00	00	00	1	00 - 01	MUTE LOCK	OFF , ON	00
		01	1	00 - 01	AD LOCK	OFF , ON	00
		02	1	00 - 01	EQ LOCK	OFF , ON	00
		03	1	00 - 01	Rcv GM EXCLUSIVE MESSAGE	OFF , ON	01
		04	1	00 - 01	Rcv BANK SELECT	OFF , ON	01
		05	1	00 - 04	BULK OUT INTERVAL TIME	50, 100, 150, 200, 300	02
		06	1	00 - 0F	PERFORMANCE SYSTEM CHANNEL	1...16	00
		07	1	28 - 58	PERFORMANCE SYSTEM TRANSPOSE	-24...0...+24 [semitone]	40
		08	1	00 - 07	LCD CONTRAST	1...8	01
		09	1	00 - 07	MULTI PORT NUMBER for MIDI OUT	1...8	00
TOTAL SIZE			0A				
00	00	10	1	00 - 01	DRUM EDIT Rcv NOTE	OFF, ON	01
TOTAL SIZE			1				
00	00	12	1	00 - 01	VOICE MAP	MU basic, MU100 Native	01
TOTAL SIZE			1				

< Table 2 - 3 >

MIDI Parameter Change table(REMOTE SWITCH) [MU native]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
0A	00	00	1	00-01	PLAY SWITCH	OFF, ON	--
		01	1	00-01	UTIL SWITCH	OFF, ON	--
		02	1	00-01	MODE SWITCH	OFF, ON	--
		03	1	00-01	EDIT SWITCH	OFF, ON	--
		04	1	00-01	EFFECT SWITCH	OFF, ON	--
		05	1	00-01	EQ SWITCH	OFF, ON	--
		06	1	00-01	MUTE/SOLO SWITCH	OFF, ON	--
		07	1	00-01	ENTER SWITCH	OFF, ON	--
		08	1	00-01	EXIT SWITCH	OFF, ON	--
		09	1	00-01	PART- SWITCH	OFF, ON	--
		0A	1	00-01	SELECT- SWITCH	OFF, ON	--
		0B	1	00-01	VALUE- SWITCH	OFF, ON	--
		0C	1	00-01	PART+ SWITCH	OFF, ON	--
		0D	1	00-01	SELECT+ SWITCH	OFF, ON	--
		0E	1	00-01	VALUE+ SWITCH	OFF, ON	--
		10	1	00-01	Piano SWITCH	OFF, ON	--
		11	1	00-01	Chrom.perc SWITCH	OFF, ON	--
		12	1	00-01	Organ SWITCH	OFF, ON	--
		13	1	00-01	Guitar SWITCH	OFF, ON	--
		14	1	00-01	Bass SWITCH	OFF, ON	--
		15	1	00-01	Strings SWITCH	OFF, ON	--
		16	1	00-01	Ensemble SWITCH	OFF, ON	--
		17	1	00-01	Brass SWITCH	OFF, ON	--
		18	1	00-01	Reed SWITCH	OFF, ON	--
		19	1	00-01	Pipe SWITCH	OFF, ON	--
		1A	1	00-01	Synth lead SWITCH	OFF, ON	--
		1B	1	00-01	Synth pad SWITCH	OFF, ON	--
		1C	1	00-01	Synth effects SWITCH	OFF, ON	--
		1D	1	00-01	Ethnic SWITCH	OFF, ON	--
		1E	1	00-01	Percussive SWITCH	OFF, ON	--
		1F	1	00-01	SFX SWITCH	OFF, ON	--
		20	1	00-01	Mode excl. SWITCH	OFF, ON	--
		21	1	00-01	Drum SWITCH	OFF, ON	--
		22	1	00-01	SELECT SWITCH	OFF, ON	--
		23	1	00-01	PART GROUP SWITCH	OFF, ON	--

REMOTE SWITCH supports Parameter Change only. Bulk Dump is not supported by REMOTE SWITCH.

< Table 2 - 4 >

MIDI Parameter Change table (MU80, MU50 INTERNAL PERFORMANCE) [MU native]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
30	pp	00	0C	20 - 7F	PERFORMANCE NAME	32...127 (ASCII CHARACTER)	depends on performance number
	pp	0C	01	00 - 7F	PERFORMANCE VOLUME	0...127	〃
	pp	0D	01	01 - 7F	PERFORMANCE PAN	L63...C...R63 (1...64...127)	〃
	pp	0E	01	00 - 60	AC1 CC NUMBER	0...95, CAT (96)	〃
	pp	0F	01	00 - 01	A/D INPUT	OFF, ON	〃
TOTAL SIZE			10				
30	pp	20	2	00-7F	REVERB TYPE MSB	refer to Effect Program List	depends on performance number
	pp	21		00-7F	REVERB TYPE LSB	〃	〃
	pp	22	1	00-7F	REVERB PARAMETER 1	〃	〃
	pp	23	1	00-7F	REVERB PARAMETER 2	〃	〃
	pp	24	1	00-7F	REVERB PARAMETER 3	〃	〃
	pp	25	1	00-7F	REVERB PARAMETER 4	〃	〃
	pp	26	1	00-7F	REVERB PARAMETER 5	〃	〃
	pp	27	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	28	1	01-7F	REVERB PAN	L63...C...R63	〃
	pp	29	2	00-7F	CHORUS TYPE MSB	refer to Effect Program List	〃

	pp	2A		00-7F	CHORUS TYPE LSB	〃	〃
	pp	2B	1	00-7F	CHORUS PARMETER 1	〃	〃
	pp	2C	1	00-7F	CHORUS PARMETER 2	〃	〃
	pp	2D	1	00-7F	CHORUS PARMETER 3	〃	〃
	pp	2E	1	00-7F	CHORUS PARMETER 4	〃	〃
	pp	2F	1	00-7F	CHORUS PARMETER 5	〃	〃
	pp	30	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	31	1	01-7F	CHORUS PAN	L63...C...R63	〃
	pp	32	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	33	2	00-7F	VARIATION TYPE MSB	refer to Effect Program List	〃
	pp	34		00-7F	VARIATION TYPE LSB	〃	〃
	pp	35	2	00-7F	VARIATION PARMETER 1 MSB	〃	〃
	pp	36		00-7F	VARIATION PARMETER 1 LSB	〃	〃
	pp	37	2	00-7F	VARIATION PARMETER 2 MSB	〃	〃
	pp	38		00-7F	VARIATION PARMETER 2 LSB	〃	〃
	pp	39	2	00-7F	VARIATION PARMETER 3 MSB	〃	〃
	pp	3A		00-7F	VARIATION PARMETER 3 LSB	〃	〃
	pp	3B	2	00-7F	VARIATION PARMETER 4 MSB	〃	〃
	pp	3C		00-7F	VARIATION PARMETER 4 LSB	〃	〃
	pp	3D	2	00-7F	VARIATION PARMETER 5 MSB	〃	〃
	pp	3E		00-7F	VARIATION PARMETER 5 LSB	〃	〃
	pp	3F	2	00-7F	VARIATION PARMETER 10 MSB	〃	〃
	pp	40		00-7F	VARIATION PARMETER 10 LSB	〃	〃
	pp	41	1	00-7F	VARIATION RETURN	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	42	1	01-7F	VARIATION PAN	L63...C...R63 (1...64...127)	〃
	pp	43	1	00-7F	SEND VARIATION TO REVERB	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	44	1	00-7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	45	1	00-7F	AC1 VARIATION CONTROL DEPTH	0...127	〃
	pp	46	1	00-01	VARIATION CONNECTION	INSERTION , SYSTEM	〃
	pp	47	1	00-03, 7F	VARATION PART	Part1...4 (0...3)	〃
						AD1, AD2 (64, 65)	
						OFF (127)	
	pp	48	2	00-7F	INSERTION EFFECT 1 TYPE MSB	refer to Effect Program List	〃
	pp	49		00-7F	INSERTION EFFECT 1 TYPE LSB	〃	〃
	pp	4A	1	00-7F	INSERTION EFFECT 1 PARAMETER1	〃	〃
	pp	4B	1	00-7F	INSERTION EFFECT 1 PARAMETER2	〃	〃
	pp	4C	1	00-7F	INSERTION EFFECT 1 PARAMETER3	〃	〃
	pp	4D	1	00-7F	INSERTION EFFECT 1 PARAMETER4	〃	〃
	pp	4E	1	00-7F	INSERTION EFFECT 1 PARAMETER5	〃	〃
	pp	4F	1	00-7F	INSERTION EFFECT 1 PARAMETER10	〃	〃
	pp	50	1	00-7F	INSERTION EFFECT 1 PART	Part1...4 (0...3)	〃
						AD1, AD2 (64, 65)	
						OFF (127)	
TOTAL SIZE			31				
30	pp	70	1	00 - 04	EQ TYPE	flat, jazz, pops, rock, concert	depends on performance number
	pp	71	1	34 - 4C	EQ GAIN1	-12...0...+12 [dB]	〃
	pp	72	1	34 - 4C	EQ GAIN2	-12...0...+12 [dB]	〃
	pp	73	1	34 - 4C	EQ GAIN3	-12...0...+12 [dB]	〃
	pp	74	1	34 - 4C	EQ GAIN4	-12...0...+12 [dB]	〃
	pp	75	1	34 - 4C	EQ GAIN5	-12...0...+12 [dB]	〃
TOTAL SIZE			06				
3n	pp	00	1	00 - 7F	PROGRAM NUMBER	1...128	depends on performance number
3n	pp	01	1	00 - 7F	BANK SELECT	0...127 (refer to XG voice map)	〃
3n	pp	02	1	00 - 7F	VOLUME	0...127	〃
3n	pp	03	1	00, 01 - 7F	PAN	RND, L63...C...R63	〃
3n	pp	04	1	00 - 7F	DRY SEND LEVEL	0...127	〃
3n	pp	05	1	00 - 7F	CHORUS SEND	0...127	〃
3n	pp	06	1	00 - 7F	REVERB SEND	0...127	〃
3n	pp	07	1	00 - 7F	VARIATION SEND	0...127	〃
3n	pp	08	1	28 - 58	NOTE SHIFT	-24...0...+24 [semitones]	〃
3n	pp	09	1	00 - 7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...+63	〃

3n	pp	0A	1	00 - 7F	LOW PASS FILTER RESONANCE		-64...0...+63	″
3n	pp	0B	1	00 - 7F	EG ATTACK TIME		-64...0...+63	″
3n	pp	0C	1	00 - 7F	EG DECAY TIME		-64...0...+63	″
3n	pp	0D	1	00 - 7F	EG RELEASE TIME		-64...0...+63	″
3n	pp	0E	1	00 - 7F	VIBRATO RATE		-64...0...+63	″
3n	pp	0F	1	00 - 7F	VIBRATO DEPTH		-64...0...+63	″
3n	pp	10	1	00 - 7F	VIBRATO DELAY		-64...0...+63	″
3n	pp	11	2	00 - 0F	DETUNE		-12.8...0...+12.7 [Hz]	″
3n	pp	11		00 - 0F			1st bit3-0→bit7-4	
							2nd bit3-0→bit3-0	
					Rcv NOTE MESSAGE		1st bit6: OFF, ON (0,1)	
					MONO/POLY MODE		1st bit5: MONO, POLY (0,1)	
					PORTAMENTO SWITCH	*	1st bit4: OFF, ON (0,1)	
3n	pp	13	1	00 - 7F	PITCH EG INITIAL LEVEL		0...127	″
3n	pp	14	1	00 - 7F	PITCH EG ATTACK TIME		0...127	″
3n	pp	15	1	00 - 7F	PITCH EG RELEASE LEVEL		0...127	″
3n	pp	16	1	00 - 7F	PITCH EG RELEASE TIME		0...127	″
3n	pp	17	1	00 - 7F	MW LFO PMOD DEPTH	*	0...127	″
3n	pp	18	1	00 - 7F	MW LFO FMOD DEPTH	*	0...127	″
3n	pp	19	1	28 - 58	PITCH BEND CONTROL	*	-24...0...+24 [semitones]	″
3n	pp	1A	1	00 - 7F	AC1 LOW PASS FILTER CONTROL	*	-64...0...63	″
3n	pp	1B	1	00 - 7F	AC1 AMPLITUDE CONTROL	*	-100...0...+100 [%]	″
3n	pp	1C	1	00 - 7F	VELOCITY SENSE DEPTH		0...127	″
3n	pp	1D	1	00 - 7F	VELOCITY SENSE OFFSET		0...127	″
3n	pp	1E	1	00 - 7F	NOTE LIMIT LOW		C-2...G8	″
3n	pp	1F	1	00 - 7F	NOTE LIMIT HIGH		C-2...G8	″
3n	pp	20	1	00 - 7F	PORTAMENTO TIME	*	0...127	″
3n	pp	21	1	01 - 7F	VELOCITY LIMIT LOW		1...127	″
3n	pp	22	1	01 - 7F	VELOCITY LIMIT HIGH		1...127	″
TOTAL SIZE			23					

n: performance part number (01-04)
pp: performance number (00-63)
Parameters marked by * will receive only the n=1 data as Common data, and will not receive the n = 2~4 data.

< Table 3 - 1 >

Parameter Base Address
Model ID = 59 [MU native]

Parameter	Adress (H)	(M)	(L)	Description	Remarks
CURRENT PERFORMANCE	09	00	00	Part1	Receives parameter change and parameter request only
	09	01	00	Part2	
	09	02	00	Part3	
	09	03	00	Part4	
	0B	00	00	Common	
	0C	00	00	Insertion1 Effect	
	0C	01	00	Insertion2 Effect	
INTERNAL PERFORMANCE	30	00	00	#1 Part1	Receives bulk dump and dump request only
		:		:	
	30	63	00	#100 Part1	
	31	00	00	#1 Part2	
		:		:	
	31	63	00	#100 Part2	
	32	00	00	#1 Part3	
		:		:	
	32	63	00	#100 Part3	
	33	00	00	#1 Part4	
		:		:	
	33	63	00	#100 Part4	

Performance Common CUR

Address (H)			Parameter
0B	00	00	System
	00	20	Effect
	00	70	EQ

40	00	00	#1 Common		
	:		:		
40	63	00	#100 Common		
50	00	00	#1 Insertion1 Effect		
	:		:		
50	63	00	#100 Insertion1 Effect		
51	00	00	#1 Insertion2 Effect		
	:		:		
51	63	00	#100 Insertion2 Effect		
60	00	00	#1 Plugin Board1		
	:		:		
60	63	00	#100 Plugin Board1		
61	00	00	#1 Plugin Board2		
	:		:		
61	63	00	#100 Plugin Board2		
62	00	00	#1 Plugin Board3		
	:		:		
62	63	00	#100 Plugin Board3		

Performance Common INT

Address (H)			Parameter
40	pp	00	System
	pp	20	Effect
	pp	70	EQ

pp:Performance#

< Table 3 - 2 >

MIDI Parameter Change table (CURRENT PERFORMANCE) [MU native]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
09	0n	00	1	00 - 7F	PROGRAM NUMBER	1...128	depends on performance number
	0n	01	1		NOT USED		--
	0n	02	1	00 - 7F	VOLUME	0...127	depends on performance number
	0n	03	1	00 - 7F	PAN	RND,L63...C...R63 (0, 1...64...127)	〃
	0n	04	1	00 - 7F	DRY SEND LEVEL	0...127	〃
	0n	05	1	00 - 7F	CHORUS SEND	0...127	〃
	0n	06	1	00 - 7F	REVERB SEND	0...127	〃
	0n	07	1	00 - 7F	VARIATION SEND	0...127	〃
	0n	08	1	28 - 58	NOTE SHIFT	-24...0...+24 [semitones]	〃
	0n	09	1	00 - 01	Rcv NOTE MESSAGE (MUTE)	OFF , ON (0, 1)	〃
	0n	0A	1	00 - 7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...+63	〃
	0n	0B	1	00 - 7F	LOW PASS FILTER RESONANCE	-64...0...+63	〃
	0n	0C	1	00 - 7F	EG ATTACK TIME	-64...0...+63	〃
	0n	0D	1	00 - 7F	EG DECAY TIME	-64...0...+63	〃
	0n	0E	1	00 - 7F	EG RELEASE TIME	-64...0...+63	〃
	0n	0F	1	00 - 7F	VIBRATO RATE	-64...0...+63	〃
	0n	10	1	00 - 7F	VIBRATO DEPTH	-64...0...+63	〃
	0n	11	1	00 - 7F	VIBRATO DELAY	-64...0...+63	〃
	0n	12	2	00 - 0F	DETUNE	-12.8...0...+12.7[Hz]	〃
	0n	13		00 - 0F		1st bit3-0→bit7-4 2nd bit3-0→bit3-0	
	0n	14	1	00 - 7F	PITCH EG INITIAL LEVEL	-64...0...+63	〃
	0n	15	1	00 - 7F	PITCH EG ATTACK TIME	-64...0...+63	〃
	0n	16	1	00 - 7F	PITCH EG RELEASE LEVEL	-64...0...+63	〃
	0n	17	1	00 - 7F	PITCH EG RELEASE TIME	-64...0...+63	〃
	0n	18	1	00 - 01	MONO/POLY MODE	MONO , POLY (0, 1)	〃
	0n	19	1	00 - 7F	VELOCITY SENSE DEPTH	0...127	〃
	0n	1A	1	00 - 7F	VELOCITY SENSE OFFSET	0...127	〃
	0n	1B	1	00 - 7F	NOTE LIMIT LOW	C-2...G8 (0...127)	〃
	0n	1C	1	00 - 7F	NOTE LIMIT HIGH	C-2...G8 (0...127)	〃
	0n	1D	1	01 - 7F	VELOCITY LIMIT LOW	1...127	〃
	0n	1E	1	01 - 7F	VELOCITY LIMIT HIGH	1...127	〃
	0n	1F	1	00 - 7F	EQ BASS	-64 ...0...+63 (-12 - +12 [dB])	〃
	0n	20	1	00 - 7F	EQ TREBLE	-64 ...0...+63 (-12 - +12 [dB])	〃
	0n	21	1	04 - 28	EQ BASS frequency	32...2.0k [Hz]	〃
	0n	22	1	1C - 3A	EQ TREBLE frequency	500...16.0k [Hz]	〃
	0n	23	1	00 - 7F	HIGH PASS FILTER CUTOFF FREQUENCY	-64...0...+63	〃
	0n	24	2	00 - 7F	BANK SELECT MSB	0...127	〃

	0n	25		00 - 7F	BANK SELECT LSB	0...127	〃
TOTAL SIZE			26				

n: performance part number (00-03)

0B	00	00	0C	20 - 7F	PERFORMANCE NAME	32...127 (ASCII CHARACTER)	depends on performance number
		0C	01	00 - 7F	PERFORMANCE VOLUME	0...127	〃
		0D	01	01 - 7F	PERFORMANCE PAN	L63...C...R63	〃
		0E	01	00 - 60	AC1 CC NUMBER	0...95, CAT	〃
		0F	01	00 - 01	A/D INPUT	OFF, ON	〃
		10	01	00 - 7F	MW LFO PMOD DEPTH	0...127	〃
		11	01	00 - 7F	MW LFO FMOD DEPTH	0...127	〃
		12	01	28 - 58	BEND PITCH CONTROL	-24..0..+24 [semitones]	〃
		13	01	00 - 7F	AC1 LOW PASS FILTER CONTROL	-64 ...0...+63	〃
		14	01	00 - 7F	AC1 AMPLITUDE CONTROL	-64 ...0...+63	〃
		15	01	00 - 7F	AC1 LFO FMOD DEPTH	0...127	〃
		16	01	00 - 01	PORTAMENTO SWITCH	OFF, ON (0, 1)	〃
		17	01	00 - 7F	PORTAMENTO TIME	0...127	〃
TOTAL SIZE			18				

0B	00	20	2	00-7F	REVERB TYPE MSB	refer to Effect Program List	depends on performance number
		21		00-7F	REVERB TYPE LSB	〃	〃
		22	1	00-7F	REVERB PARAMETER 1	〃	〃
		23	1	00-7F	REVERB PARAMETER 2	〃	〃
		24	1	00-7F	REVERB PARAMETER 3	〃	〃
		25	1	00-7F	REVERB PARAMETER 4	〃	〃
		26	1	00-7F	REVERB PARAMETER 5	〃	〃
		27	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB (0...96...127)	〃
		28	1	01-7F	REVERB PAN	L63...C...R63	〃
		29	2	00-7F	CHORUS TYPE MSB	refer to Effect Program List	〃
		2A		00-7F	CHORUS TYPE LSB	〃	〃
		2B	1	00-7F	CHORUS PARAMETER 1	〃	〃
		2C	1	00-7F	CHORUS PARAMETER 2	〃	〃
		2D	1	00-7F	CHORUS PARAMETER 3	〃	〃
		2E	1	00-7F	CHORUS PARAMETER 4	〃	〃
		2F	1	00-7F	CHORUS PARAMETER 5	〃	〃
		30	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB (0...96...127)	〃
		31	1	01-7F	CHORUS PAN	L63...C...R63 (1...64...127)	〃
		32	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB...+6dB (0...96...127)	〃
		33	2	00-7F	VARIATION TYPE MSB	refer to Effect Program List	〃
		34		00-7F	VARIATION TYPE LSB	〃	〃
		35	2	00-7F	VARIATION PARAMETER 1 MSB	〃	〃
		36		00-7F	VARIATION PARAMETER 1 LSB	〃	〃
		37	2	00-7F	VARIATION PARAMETER 2 MSB	〃	〃
		38		00-7F	VARIATION PARAMETER 2 LSB	〃	〃
		39	2	00-7F	VARIATION PARAMETER 3 MSB	〃	〃
		3A		00-7F	VARIATION PARAMETER 3 LSB	〃	〃
		3B	2	00-7F	VARIATION PARAMETER 4 MSB	〃	〃
		3C		00-7F	VARIATION PARAMETER 4 LSB	〃	〃
		3D	2	00-7F	VARIATION PARAMETER 5 MSB	〃	〃
		3E		00-7F	VARIATION PARAMETER 5 LSB	〃	〃
		3F	2	00-7F	VARIATION PARAMETER 10 MSB	〃	〃
		40		00-7F	VARIATION PARAMETER 10 LSB	〃	〃
		41	1	00-7F	VARIATION RETURN	-∞dB...0dB...+6dB (0...96...127)	〃
		42	1	01-7F	VARIATION PAN	L63...C...R63	〃
		43	1	00-7F	SEND VARIATION TO REVERB	-∞dB...0dB...+6dB (0...96...127)	〃
		44	1	00-7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB (0...96...127)	〃
		45	1	00-7F	AC1 VARIATION CONTROL DEPTH	0...127	〃
		46	1	00-01	VARIATION CONNECTION	INSERTION , SYSTEM	〃
		47	1	00-7F	VARIATION PART	Part1...4 (0...3) AD1, AD2 (64, 65) OFF (127)	〃
TOTAL SIZE				28			

0B	00	70	1	00 - 04	EQ TYPE	flat, jazz, pops, rock, concert	depends on performance number
		71	1	34 - 4C	EQ GAIN1	-12...0...+12 [dB]	〃
		72	1	34 - 4C	EQ GAIN2	-12...0...+12 [dB]	〃
		73	1	34 - 4C	EQ GAIN3	-12...0...+12 [dB]	〃
		74	1	34 - 4C	EQ GAIN4	-12...0...+12 [dB]	〃
		75	1	34 - 4C	EQ GAIN5	-12...0...+12 [dB]	〃
TOTAL SIZE			06				
0C	00	00	2	00-7F	INSERTION EFFECT 1 TYPE MSB	refer to Effect Program List	depends on performance number
		01		00-7F	INSERTION EFFECT 1 TYPE LSB	〃	〃
		02	2	00-7F	INSERTION EFFECT 1 PARAMETER1 MSB	〃	〃
		03		00-7F	INSERTION EFFECT 1 PARAMETER1 LSB	〃	〃
		04	2	00-7F	INSERTION EFFECT 1 PARAMETER2 MSB	〃	〃
		05		00-7F	INSERTION EFFECT 1 PARAMETER2 LSB	〃	〃
		06	2	00-7F	INSERTION EFFECT 1 PARAMETER3 MSB	〃	〃
		07		00-7F	INSERTION EFFECT 1 PARAMETER3 LSB	〃	〃
		08	2	00-7F	INSERTION EFFECT 1 PARAMETER4 MSB	〃	〃
		09		00-7F	INSERTION EFFECT 1 PARAMETER4 LSB	〃	〃
		0A	2	00-7F	INSERTION EFFECT 1 PARAMETER5 MSB	〃	〃
		0B		00-7F	INSERTION EFFECT 1 PARAMETER5 LSB	〃	〃
		0C	2	00-7F	INSERTION EFFECT 1 PARAMETER10 MSB	〃	〃
		0D		00-7F	INSERTION EFFECT 1 PARAMETER10 LSB	〃	〃
		0E	1	00-7F	INSERTION EFFECT 1 PART	Part1...4 (0...3) AD1, AD2 (64, 65) OFF (127)	〃
TOTAL SIZE			0F				
0C	01	00	2	00-7F	INSERTION EFFECT 2 TYPE MSB	refer to Effect Program List	depends on performance number
		01		00-7F	INSERTION EFFECT 2 TYPE LSB	〃	〃
		02	2	00-7F	INSERTION EFFECT 2 PARAMETER1 MSB	〃	〃
		03		00-7F	INSERTION EFFECT 2 PARAMETER1 LSB	〃	〃
		04	2	00-7F	INSERTION EFFECT 2 PARAMETER2 MSB	〃	〃
		05		00-7F	INSERTION EFFECT 2 PARAMETER2 LSB	〃	〃
		06	2	00-7F	INSERTION EFFECT 2 PARAMETER3 MSB	〃	〃
		07		00-7F	INSERTION EFFECT 2 PARAMETER3 LSB	〃	〃
		08	2	00-7F	INSERTION EFFECT 2 PARAMETER4 MSB	〃	〃
		09		00-7F	INSERTION EFFECT 2 PARAMETER4 LSB	〃	〃
		0A	2	00-7F	INSERTION EFFECT 2 PARAMETER5 MSB	〃	〃
		0B		00-7F	INSERTION EFFECT 2 PARAMETER5 LSB	〃	〃
		0C	2	00-7F	INSERTION EFFECT 2 PARAMETER10 MSB	〃	〃
		0D		00-7F	INSERTION EFFECT 2 PARAMETER10 LSB	〃	〃
		0E	1	00-7F	INSERTION EFFECT 2 PART	Part1...4 (0...3) AD1, AD2 (64, 65) OFF (127)	〃
TOTAL SIZE			0F				

< Table 3 - 3 >

MIDI Parameter Change table (INTERNAL PERFORMANCE) [MU native]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
3n	pp	00	1	00 - 7F	PROGRAM NUMBER	1...128	depends on performance number
3n	pp	01	1	00 - 7F	BANK SELECT	0...127	〃
3n	pp	02	1	00 - 7F	VOLUME	0...127	〃
3n	pp	03	1	00,01-7F	PAN	RND, L63...C...R63	〃
3n	pp	04	1	00 - 7F	DRY SEND LEVEL	0...127	〃
3n	pp	05	1	00 - 7F	CHORUS SEND	0...127	〃
3n	pp	06	1	00 - 7F	REVERB SEND	0...127	〃
3n	pp	07	1	00 - 7F	VARIATION SEND	0...127	〃
3n	pp	08	1	28 - 58	NOTE SHIFT	-24...0...+24 [semitones]	〃
3n	pp	09	1	00 - 7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...+63	〃
3n	pp	0A	1	00 - 7F	LOW PASS FILTER RESONANCE	-64...0...+63	〃
3n	pp	0B	1	00 - 7F	EG ATTACK TIME	-64...0...+63	〃
3n	pp	0C	1	00 - 7F	EG DECAY TIME	-64...0...+63	〃

3n	pp	0D	1	00 - 7F	EG RELEASE TIME	-64...0...+63	〃
3n	pp	0E	1	00 - 7F	VIBRATO RATE	-64...0...+63	〃
3n	pp	0F	1	00 - 7F	VIBRATO DEPTH	-64...0...+63	〃
3n	pp	10	1	00 - 7F	VIBRATO DELAY	-64...0...+63	〃
3n	pp	11	2	00 - 0F	DETUNE	-12.8...0...+12.7 [Hz]	〃
3n	pp	12		00 - 7F		1st bit3-0→bit7-4	
						2nd bit3-0→bit3-0	
					Rcv NOTE MESSAGE	1st bit6: OFF, ON (0, 1)	
					MONO/POLY MODE	1st bit5: MONO, POLY (0, 1)	
3n	pp	13	1	00 - 7F	PITCH EG INITIAL LEVEL	0...127	〃
3n	pp	14	1	00 - 7F	PITCH EG ATTACK TIME	0...127	〃
3n	pp	15	1	00 - 7F	PITCH EG RELEASE LEVEL	0...127	〃
3n	pp	16	1	00 - 7F	PITCH EG RELEASE TIME	0...127	〃
3n	pp	17	1	00 - 7F	VELOCITY SENSE DEPTH	0...127	〃
3n	pp	18	1	00 - 7F	VELOCITY SENSE OFFSET	0...127	〃
3n	pp	19	1	00 - 7F	NOTE LIMIT LOW	C-2...G8	〃
3n	pp	1A	1	00 - 7F	NOTE LIMIT HIGH	C-2...G8	〃
3n	pp	1B	1	01 - 7F	VELOCITY LIMIT LOW	1...127	〃
3n	pp	1C	1	01 - 7F	VELOCITY LIMIT HIGH	1...127	〃
3n	pp	1D	1	00 - 7F	EQ BASS	-64 ...0...+63 (-12 - +12 [dB])	〃
3n	pp	1E	1	00 - 7F	EQ TREBLE	-64 ...0...+63 (-12 - +12 [dB])	〃
3n	pp	1F	1	04 - 28	EQ BASS frequency	32...2.0k [Hz]	〃
3n	pp	20	1	1C - 3A	EQ TREBLE frequency	500...16.0k [Hz]	〃
3n	pp	21	1	00 - 7F	HIGH PASS FILTER CUTOFF FREQUENCY	-64...0...+63	〃
TOTAL SIZE			22				
3n	pp	30	2	00 - 7F	BANK SELECT MSB	0...127	depends on performance number
3n	pp			00 - 7F	BANK SELECT LSB	0...127	〃
TOTAL SIZE			2				

n: performance part number (00-03)
pp:performance number (00-63)

40	pp	00	0C	20 - 7F	PERFORMANCE NAME	32...127 (ASCII CHARACTER)	depends on performance number
	pp	0C	01	00 - 7F	PERFORMANCE VOLUME	0...127	〃
	pp	0D	01	01 - 7F	PERFORMANCE PAN	L63...C...R63 (1...64...127)	〃
	pp	0E	01	00 - 60	AC1 CC NUMBER	0...95, CAT	〃
	pp	0F	01	00 - 01	A/D INPUT	OFF, ON	〃
	pp	10	01	00 - 7F	MW LFO PMOD DEPTH	0...127	〃
	pp	11	01	00 - 7F	MW LFO FMOD DEPTH	0...127	〃
	pp	12	01	28 - 58	BEND PITCH CONTROL	-24..0..+24 [semitones]	〃
	pp	13	01	00 - 7F	AC1 FILTER CONTROL	-64 ...0...+63	〃
	pp	14	01	00 - 7F	AC1 AMPLITUDE CONTROL	-100...0...+100 [%]	〃
	pp	15	01	00 - 7F	AC1 LFO FMOD DEPTH	0...127	〃
	pp	16	01	00 - 01	PORTAMENTO SWITCH	OFF, ON (0, 1)	〃
	pp	17	01	00 - 7F	PORTAMENTO TIME	0...127	〃
TOTAL SIZE			18				
40	pp	20	2	00-7F	REVERB TYPE MSB	refer to Effect Program List	depends on performance number
	pp	21		00-7F	REVERB TYPE LSB	〃	〃
	pp	22	1	00-7F	REVERB PARAMETER 1	〃	〃
	pp	23	1	00-7F	REVERB PARAMETER 2	〃	〃
	pp	24	1	00-7F	REVERB PARAMETER 3	〃	〃
	pp	25	1	00-7F	REVERB PARAMETER 4	〃	〃
	pp	26	1	00-7F	REVERB PARAMETER 5	〃	〃
	pp	27	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	28	1	01-7F	REVERB PAN	L63...C...R63	〃
	pp	29	2	00-7F	CHORUS TYPE MSB	refer to Effect Program List	〃
	pp	2A		00-7F	CHORUS TYPE LSB	〃	〃
	pp	2B	1	00-7F	CHORUS PARMETER 1	〃	〃
	pp	2C	1	00-7F	CHORUS PARMETER 2	〃	〃
	pp	2D	1	00-7F	CHORUS PARMETER 3	〃	〃
	pp	2E	1	00-7F	CHORUS PARMETER 4	〃	〃

	pp	2F	1	00-7F	CHORUS PARMETER 5	〃	〃
	pp	30	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	31	1	01-7F	CHORUS PAN	L63...C...R63	〃
	pp	32	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	33	2	00-7F	VARIATION TYPE MSB	refer to Effect Program List	〃
	pp	34		00-7F	VARIATION TYPE LSB	〃	〃
	pp	35	2	00-7F	VARIATION PARMETER 1 MSB	〃	〃
	pp	36		00-7F	VARIATION PARMETER 1 LSB	〃	〃
	pp	37	2	00-7F	VARIATION PARMETER 2 MSB	〃	〃
	pp	38		00-7F	VARIATION PARMETER 2 LSB	〃	〃
	pp	39	2	00-7F	VARIATION PARMETER 3 MSB	〃	〃
	pp	3A		00-7F	VARIATION PARMETER 3 LSB	〃	〃
	pp	3B	2	00-7F	VARIATION PARMETER 4 MSB	〃	〃
	pp	3C		00-7F	VARIATION PARMETER 4 LSB	〃	〃
	pp	3D	2	00-7F	VARIATION PARMETER 5 MSB	〃	〃
	pp	3E		00-7F	VARIATION PARMETER 5 LSB	〃	〃
	pp	3F	2	00-7F	VARIATION PARMETER 10 MSB	〃	〃
	pp	40		00-7F	VARIATION PARMETER 10 LSB	〃	〃
	pp	41	1	00-7F	VARIATION RETURN	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	42	1	01-7F	VARIATION PAN	L63...C...R63 (1...64...127)	〃
	pp	43	1	00-7F	SEND VARIATION TO REVERB	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	44	1	00-7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB (0...96...127)	〃
	pp	45	1	00-7F	AC1 VARIATION CONTROL DEPTH	0...127	〃
	pp	46	1	00-01	VARIATION CONNECTION	INSERTION, SYSTEM	〃
	pp	47	1	00-03, 7F	VARATION PART	Part1...4 (0...3) AD1, AD2 (64, 65) OFF (127)	〃
TOTAL SIZE			28				
40	pp	70	1	00 - 04	EQ TYPE	flat, jazz, pops, rock, concert	depends on performance number
	pp	71	1	34 - 4C	EQ GAIN1	-12...0...+12 [dB]	〃
	pp	72	1	34 - 4C	EQ GAIN2	-12...0...+12 [dB]	〃
	pp	73	1	34 - 4C	EQ GAIN3	-12...0...+12 [dB]	〃
	pp	74	1	34 - 4C	EQ GAIN4	-12...0...+12 [dB]	〃
	pp	75	1	34 - 4C	EQ GAIN5	-12...0...+12 [dB]	〃
TOTAL SIZE			06				
50	pp	00	2	00-7F	INSERTION EFFECT 1 TYPE MSB	refer to Effect Program List	depends on performance number
	pp	01		00-7F	INSERTION EFFECT 1 TYPE LSB	〃	〃
	pp	02	2	00-7F	INSERTION EFFECT 1 PARAMETER1 MSB	〃	〃
	pp	03		00-7F	INSERTION EFFECT 1 PARAMETER1 LSB	〃	〃
	pp	04	2	00-7F	INSERTION EFFECT 1 PARAMETER2 MSB	〃	〃
	pp	05		00-7F	INSERTION EFFECT 1 PARAMETER2 LSB	〃	〃
	pp	06	2	00-7F	INSERTION EFFECT 1 PARAMETER3 MSB	〃	〃
	pp	07		00-7F	INSERTION EFFECT 1 PARAMETER3 LSB	〃	〃
	pp	08	2	00-7F	INSERTION EFFECT 1 PARAMETER4 MSB	〃	〃
	pp	09		00-7F	INSERTION EFFECT 1 PARAMETER4 LSB	〃	〃
	pp	0A	2	00-7F	INSERTION EFFECT 1 PARAMETER5 MSB	〃	〃
	pp	0B		00-7F	INSERTION EFFECT 1 PARAMETER5 LSB	〃	〃
	pp	0C	2	00-7F	INSERTION EFFECT 1 PARAMETER10 MSB	〃	〃
	pp	0D		00-7F	INSERTION EFFECT 1 PARAMETER10 LSB	〃	〃
	pp	0E	1	00-7F	INSERTION EFFECT 1 PART	Part1...4 (0...3) AD1, AD2 (64, 65) OFF (127)	〃
TOTAL SIZE			0F				
51	pp	00	2	00-7F	INSERTION EFFECT 2 TYPE MSB	refer to Effect Program List	depends on performance number
	pp	01		00-7F	INSERTION EFFECT 2 TYPE LSB	〃	〃
	pp	02	2	00-7F	INSERTION EFFECT 2 PARAMETER1 MSB	〃	〃
	pp	03		00-7F	INSERTION EFFECT 2 PARAMETER1 LSB	〃	〃
	pp	04	2	00-7F	INSERTION EFFECT 2 PARAMETER2 MSB	〃	〃
	pp	05		00-7F	INSERTION EFFECT 2 PARAMETER2 LSB	〃	〃
	pp	06	2	00-7F	INSERTION EFFECT 2 PARAMETER3 MSB	〃	〃

	pp	07		00-7F	INSERTION EFFECT 2 PARAMETER3 LSB	〃	〃
	pp	08	2	00-7F	INSERTION EFFECT 2 PARAMETER4 MSB	〃	〃
	pp	09		00-7F	INSERTION EFFECT 2 PARAMETER4 LSB	〃	〃
	pp	0A	2	00-7F	INSERTION EFFECT 2 PARAMETER5 MSB	〃	〃
	pp	0B		00-7F	INSERTION EFFECT 2 PARAMETER5 LSB	〃	〃
	pp	0C	2	00-7F	INSERTION EFFECT 2 PARAMETER10 MSB	〃	〃
	pp	0D		00-7F	INSERTION EFFECT 2 PARAMETER10 LSB	〃	〃
	pp	0E	1	00-7F	INSERTION EFFECT 2 PART	Part1...4 (0...3) AD1, AD2 (64, 65) OFF (127)	〃
TOTAL SIZE			0F				
60	pp	00	64	00-7F	PLUGIN BOARD 1 PARAMETER	depends on Plugin Board	depends on performance number
TOTAL SIZE			64				
61	pp	00	64	00-7F	PLUGIN BOARD 2 PARAMETER	depends on Plugin Board	depends on performance number
TOTAL SIZE			64				
62	pp	00	64	00-7F	PLUGIN BOARD 3 PARAMETER	depends on Plugin Board	depends on performance number
TOTAL SIZE			64				

pp: performance number (00-63)

MIDI implementation chart

YAMAHA [Tone Generator] Date :22-MAY-1998
Model MU128 MIDI Implementation Chart Version : 1.0

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default	x	1 - 16	
	Changed	x	1 - 16	
Mode	Default	x	3	
	Messages	x	3, 4 (m=1) *2	
	Altered	**************	x	
Note Number		x	0 - 127	
	: True voice	**************	0 - 127	
Velocity	Note ON	x	o 9nH,v=1-127	
	Note OFF	x	x	
After Touch	Key's	x	o *1	
	Ch's	x	o *1	
Pitch Bend		x	o 0-24 semi *1	
Control Change	0,32	x	o *1	Bank Select
	1,5,7,10,11	x	o *1	
	6,38	x	o *1	Data Entry
	64-67	x	o *1	
	71-74	x	o *1	Sound Controller
	84	x	o *1	Portamento Cntrl
	91,93,94	x	o *1	Effect Depth
	96-97	x	o *1	RPN Inc,Dec
	98-99	x	o *1	NRPN LSB,MSB
	100-101	x	o *1	RPN LSB,MSB

Prog Change : True #	x **************	o 0 - 127 @	
System Exclusive	o *3	o *3	
Common : Song Pos. : Song Sel. : Tune	x x x	x x x	
System : Clock Real Time: Commands	x x	x x	
Aux Messages : All Sound Off : Reset All Cntrls : Local ON/OFF : All Notes OFF : Active Sense : Reset	x x x x x x	o(120,126,127) o(121) x o(123-125) o x	

Notes: *1 receive if switch is on.
*2 m is always treated as "1" regardless of its value.
*3 transmit/receive if exclusive switch is on.

Mode 1 : OMNI ON , POLY   Mode 2 : OMNI ON ,MONO   o : Yes
Mode 3 : OMNI OFF, POLY   Mode 4 : OMNI OFF,MONO   x : No

XG Voice List (Normal voices)

Bank Select LSB=Bank number

						Key Scale Panning		Stereo		Single		Slow		Fast Decay	
Bank Select MSB		0		0		0		0		0		0		0	
Bank Select LSB		0		0		1		3		6		8		12	
Instrument Group	Pgm # (1-128)	Mu basic	E	MU100 Native	E		E		E		E		E		E
Piano	1	GrandPno	1	† GrandP #	1	GrndPnoK	1								
	2	BritePno	1	† BriteP #	1	BritPnoK	1	† StBrtPno	2						
	3	El.Grand	2			ElGrPnoK	2								
	4	HnkyTonk	2			HnkyTnkK	2								
	5	E.Piano1	2	† EPiano1#	2	El.Pno1K	1								
	6	E.Piano2	2	† EPiano2#	1	El.Pno2K	1							† ChoEPDcy	2
	7	Harpsi.	1			Harpsi.K	1								
	8	Clavi	2	† Clavi #	2	Clavi K	1								
Chromatic Percussion	9	Celesta	1												
	10	Glocken	1												
	11	MusicBox	2												
	12	Vibes	1			Vibes K	1								
	13	Marimba	1			MarimbaK	1								
	14	Xylophon	1												
	15	TubulBel	1												
	16	Dulcimer	1												
Organ	17	DrawOrgn	1	† DrawOrg#	2			† StDrawOr	2						
	18	PercOrgn	1	† PercOrg#	2										
	19	RockOrgn	2	† RockOrg#	2										
	20	ChrchOrg	2												
	21	ReedOrgn	1												
	22	Acordion	2												
	23	Harmnica	1												
	24	TangoAcd	2	† TangoAc#	2										
Guitar	25	NylonGtr	1	† NylonGt#	1										
	26	SteelGtr	1	† SteelGt#	1										
	27	Jazz Gtr	1	† JazzGtr#	2										
	28	CleanGtr	1												
	29	Mute Gtr	1	† MuteGtr#	2										
	30	Ovrdrive	1	† Ovrdriv#	2										
	31	Dist.Gtr	1	† DistGtr#	1									DstRthmG **	2
	32	GtrHarmo	1												
Bass	33	Aco.Bass	1	† AcoBass#	1										
	34	FngrBass	1	† FngrBa #	1										
	35	PickBass	1							PickBa 2	1				
	36	Fretless	1	† Frtless#	1										
	37	SlapBas1	1	† SlapBa1#	2										
	38	SlapBas2	1	† SlapBa2#	2										
	39	SynBass1	1												
	40	SynBass2	2							MelloSBa	1			Seq Bass	2
Strings	41	Violin	1	† Violin #	1							Slow Vln	1		
	42	Viola	1												
	43	Cello	1												
	44	Contrabs	1												
	45	Trem.Str	1	† TremStr#	2							SlwTrStr	1		
	46	Pizz.Str	1												
	47	Harp	1												
	48	Timpani	1												
Ensemble	49	Strings1	1	† Strngs1#	1			S.Strngs	2			Slow Str	1		
	50	Strings2	1	† Strngs2#	1			S.SlwStr	2			LegatoSt	2		
	51	Syn Str1	2									† Memory	2		
	52	Syn Str2	2												
	53	ChoirAah	1					S.Choir	2						
	54	VoiceOoh	1												
	55	SynVoice	1												
	56	Orch.Hit	2											LoFi Hit ***	2
Brass	57	Trumpet	1	† Trumpet#	1										
	58	Trombone	1	† Trmbone#	1										
	59	Tuba	1												
	60	Mute Trp	1	† MuteTrp#	2										
	61	Fr. Horn	1							FrHrSolo 1					
	62	BrssSect	1	† BrssSec#	2			StBrsSec ***	2						
	63	SynBrss1	2											Quack Br	2
	64	SynBrss2	1												

🡇 Continued on page 76 🡇

[shaded box] : Same as Bank 0 — E: Number of element

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

VOICE

Double Attack		Bright 1		Bright 2		Dark 1		Dark 2		Resonant		LFO-Cutoff Freq	
0		0		0		0		0		0		0	
14		16		17		18		19		20		21	
	E		E		E		E		E		E		E
						MelloGrP	1						
										† ResoBrtP	1		
						MelloEP1	2						
		NylonGt2	1										
		SteelGt2	1										
						MelloGtr	1						
						FingrDrk	2						
												† CsmicSlp	2
		† BrtSlpSp	2										
						SynBa1Dk	1			FastResB	1	† TL66	2
						ClkSynBa	2	SynBa2Dk	1				
† SfzStrgs	1												
						† Zephyr	2						
												† TradeWnd	2
		Ch.Aahs2	2										
		Trumpet2	1	BriteTrp	2								
						Trmbone2	2						
		Tuba 2	1										
SfrzndBr **	2					MildBrss ***	2						
										RezSynBr	2		
						Soft Brs	2						

🡇 Continued on page 77 🡇

XG Voice List (Normal voices)

Bank Select LSB=Bank number

				Vel-cutoff freq		Attack		Release		Sweep		Resonant Sweep	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		22		24		25		26		27	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
Piano	1	GrandPno	1										
	2	BritePno	1										
	3	El.Grand	2										
	4	HnkyTonk	2										
	5	E.Piano1	2										
	6	E.Piano2	2										
	7	Harpsi.	1					Harpsi.2	2				
	8	Clavi	2									ClaviWah	2
Chromatic Percussion	9	Celesta	1										
	10	Glocken	1										
	11	MusicBox	2										
	12	Vibes	1										
	13	Marimba	1										
	14	Xylophon	1										
	15	TubulBel	1										
	16	Dulcimer	1										
Organ	17	DrawOrgn	1										
	18	PercOrgn	1			70sPcOr1	2						
	19	RockOrgn	2										
	20	ChrchOrg	2										
	21	ReedOrgn	1										
	22	Acordion	2										
	23	Harmnica	1										
	24	TangoAcd	2										
Guitar	25	NylonGtr	1					NylonGt3	2				
	26	SteelGtr	1										
	27	Jazz Gtr	1										
	28	CleanGtr	1										
	29	Mute Gtr	1										
	30	Ovrdrive	1										
	31	Dist.Gtr	1			DistGtr2 **	2						
	32	GtrHarmo	1										
Bass	33	Aco.Bass	1										
	34	FngrBass	1									FlangeBa	2
	35	PickBass	1										
	36	Fretless	1										
	37	SlapBas1	1									ResoSlap	1
	38	SlapBas2	1	† Wah Slap	2								
	39	SynBass1	1			AcidBass	1					ResoBass ***	1
	40	SynBass2	2	† Zealot	2								
Strings	41	Violin	1										
	42	Viola	1										
	43	Cello	1										
	44	Contrabs	1										
	45	Trem.Str	1										
	46	Pizz.Str	1										
	47	Harp	1										
	48	Timpani	1										
Ensemble	49	Strings1	1			Arco Str	2						
	50	Strings2	1										
	51	Syn Str1	2									Reso Str	2
	52	Syn Str2	2										
	53	ChoirAah	1										
	54	VoiceOoh	1										
	55	SynVoice	1										
	56	Orch.Hit	2										
Brass	57	Trumpet	1										
	58	Trombone	1										
	59	Tuba	1										
	60	Mute Trp	1										
	61	Fr. Horn	1										
	62	BrssSect	1										
	63	SynBrss1	2			PolyBrss	2					SynBrss3	2
	64	SynBrss2	1										

🡇 Continued on page 78 🡇

(shaded box) : Same as Bank 0

E: Number of element

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Muted		Complex-FEG		Detune 1		Detune 2		Detune 3		Octave 1		Octave 2	
0		0		0		0		0		0		0	
28		29		32		33		34		35		36	
	E		E		E		E		E		E		E
				† DtndBrtP	2								
				Det.CP80	2					† Synth CP	2		
				Chor.EP1	2								
				Chor.EP2	2	DX Hard	2	DXLegend	2				
				HarpsiDt	2					Harpsi.3	2		
										Dulcimr2	2		
				DetDrwOr	2	60sDrOr1	2	60sDrOr2	2	70sDrOr1	2	DrawOrg2	2
				DetPrcOr	2	Lite Org	2						
				ChurOrg3	2					ChurOrg2	2		
				† ReedOrDt	2								
				AccordIt	2								
				Harmo. 2	2								
				† NylnGtDt	2								
				† StlGtrDt	2					12StrGtr	2		
				Jazz Amp	2								
				ChorusGt	2	† ChoGtrLt	2						
				† OdrvGtDt	2								
										DistGtr3 **	2	PowerGt2 **	2
				† FngrBaDt	2								
MutePkBa	1												
				Fretles2	2	Fretles3	2	Fretles4	2				
				PunchThm	2								
† MtdPulsB	1	† SlwAttck	1							Clv Bass	2		
				SmthSynB	2								
										† Pizz Oct	2		
										60sStrng	2		
										Syn Str3 **	2		
				MelChoir	2								
										OrchHit2	2		
				Warm Trp	2								
				FrHorn 2	1								
										Tp&TbSec	2	Tp&TbSc2 ***	2
		† AnalgSfz	2	JumpBrss	2								

🠋 Continued on page 79 🠋

XG Voice List (normal voices)

Bank Select LSB=Bank number

				5th 1		5th 2		Bend		Tutti 1		Tutti 2	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		37		38		39		40		41	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
Piano	1	GrandPno	1							PianoStr	2	Dream	2
	2	BritePno	1							† SyPadPno	2		
	3	El.Grand	2							LayerCP1	2	LayerCP2	2
	4	HnkyTonk	2										
	5	E.Piano1	2							HardEl.P	2		
	6	E.Piano2	2							DX Phase	2	DX+Analg	2
	7	Harpsi.	1							† ElHarpsi	2		
	8	Clavi	2							† CsmcClav	2		
Chromatic Percussion	9	Celesta	1										
	10	Glocken	1										
	11	MusicBox	2										
	12	Vibes	1										
	13	Marimba	1										
	14	Xylophon	1										
	15	TubulBel	1										
	16	Dulcimer	1										
Organ	17	DrawOrgn	1	60sDrOr3	2	Even Bar	2			16+2"2/3	2		
	18	PercOrgn	1	PercOrg2	2								
	19	RockOrgn	2										
	20	ChrchOrg	2							NotreDam	2		
	21	ReedOrgn	1							Puff Org	2		
	22	Acordion	2										
	23	Harmnica	1										
	24	TangoAcd	2										
Guitar	25	NylonGtr	1							† Wayside	2		
	26	SteelGtr	1							Nyln&Stl	2	Stl&Body	2
	27	Jazz Gtr	1							† OrganGtr	2	† OctPlate	2
	28	CleanGtr	1										
	29	Mute Gtr	1							FunkGtr1	2	MuteStlG	2
	30	Ovrdrive	1							† Parallel	2		
	31	Dist.Gtr	1	PowerGt1 **	2	Dst.5ths **	2			FeedbkGt	2	FeedbkG2	2
	32	GtrHarmo	1										
Bass	33	Aco.Bass	1							JazzRthm	2	† PckAcoBa	2
	34	FngrBass	1							Ba&DstEG	2		
	35	PickBass	1							† PkB&MtGt	2		
	36	Fretless	1										
	37	SlapBas1	1										
	38	SlapBas2	1										
	39	SynBass1	1							TechnoBa	2	† Kik'n'Ba	2
	40	SynBass2	2							ModulrBa	2	DX Bass	2
Strings	41	Violin	1							† Unison	2		
	42	Viola	1							† VlaDoubl	2		
	43	Cello	1										
	44	Contrabs	1										
	45	Trem.Str	1							Susp.Str	2		
	46	Pizz.Str	1							† Sleep	2		
	47	Harp	1							YangChin	2		
	48	Timpani	1										
Ensemble	49	Strings1	1							Orchestr	2	Orchstr2	2
	50	Strings2	1							Warm Str	2	Kingdom	2
	51	Syn Str1	2					† Monarchy	2	GrandPad ***	2	† SweepStr	2
	52	Syn Str2	2					† WormHole	2				
	53	ChoirAah	1					† Gasp	2	ChoirStr	2	† Dead Sea	2
	54	VoiceOoh	1										
	55	SynVoice	1							SyVoice2	2	Choral	2
	56	Orch.Hit	2							† Throne	2		
Brass	57	Trumpet	1										
	58	Trombone	1										
	59	Tuba	1										
	60	Mute Trp	1							† Backyard	2		
	61	Fr. Horn	1	HornOrch	2								
	62	BrssSect	1					BrssFall **	1	BrssSec2	2	Hi Brass	2
	63	SynBrss1	2							SyBrsSub ***	2		
	64	SynBrss2	1							SynBrss4	2	ChoirBrs	2

🡇 Continued on page 80 🡇

[shaded box] : Same as Bank 0 E: Number of element

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Tutti 3		Velocity Switch		Velocity Cross Fade		Detune 4		Tutti 4		Tutti 5		Tutti 6	
0		0		0		0		0		0		0	
42		43		45		48		52		53		54	
	E		E		E		E		E		E		E
				VX El.P1	2								
DXKotoEP	2			VX El.P2	2	† ChoEP K	2	† DXMallet	2				
				HardVibe	2								
		VelGtHrm	2										
		FunkGtr2	2	Jazz Man	2								
		Gt.Pinch	2										
† TwinDist	2	RckRthm2 **	2	RckRthm1 **	2								
		† Blink Ba	2	VXUprght	2								
		FngrSlap	2	FngBass2	2								
		VeloSlap	2										
† NEP	2												
† DXBa Brt	2												
		† Roll&Hit	2										
TremOrch	2			Velo.Str	2			† Lento	2				
† SwpStOct	2												
MelloBrs	2							† Bund	2	† FakeHorn	2	† FkHrnOct	2
				AnVelBr1	2								
† AnHrnRch	2			AnVelBr2	2								

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XG Voice List (Normal voices)

Bank Select LSB=Bank number

				Other Waves 1		Other Waves 2		Other Waves 3		Other Waves 4		Other Waves 5	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		64		65		66		67		68	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
Piano	1	GrandPno	1	† ConGrnd	1	† ConGrndK	1	† DblConGr	2	† MIDIGrd1	2	† MIDIGrd2	2
	2	BritePno	1	† BrConGrd	1	† BrConGrK	1	† MIDIGrd3	2	† MIDIGrd4	2	† OldPiano	2
	3	El.Grand	2										
	4	HnkyTonk	2										
	5	E.Piano1	2	60sEl.P1	1	† Old EP	1	† Tribecca	1	† Diploid1	2	† Flops	1
	6	E.Piano2	2	† Shrakawa	2	† OldEP Tn	2	† Flips	1	† FlipsDtd	2	† Flicks	1
	7	Harpsi.	1	† SynHrpsi	2								
	8	Clavi	2	PulseClv	1	PierceCl	2	† ClrClavi	1	† SwpClavi	1	† SynClavi	1
Chromatic Percussion	9	Celesta	1	† FMCelsta	1								
	10	Glocken	1										
	11	MusicBox	2	Orgel	2	† SmalOrgl	2						
	12	Vibes	1										
	13	Marimba	1	SineMrmb	2								
	14	Xylophon	1										
	15	TubulBel	1										
	16	Dulcimer	1										
Organ	17	DrawOrgn	1	Organ Ba	1	70sDrOr2	2	CheezOrg	2	DrawOrg3	2	StdiumOr ***	1
	18	PercOrgn	1	JazOrgan ***	1	WarmJzOr ***	2	ClikOrgn ***	2	† Grace	2	† CrnGrace	2
	19	RockOrgn	2	RotaryOr	2	SloRotar	2	FstRotar	2	† GlaclRtr	2		
	20	ChrchOrg	2	OrgFlute	2	TrmOrgFl	2						
	21	ReedOrgn	1	† SyReedDk	2								
	22	Acordion	2										
	23	Harmnica	1										
	24	TangoAcd	2	TngoAcd2	2	† TightAcd	1	† TghtAcdD	2				
Guitar	25	NylonGtr	1	† EsGuitar	1	† EsGtrHrd	1	† EsGtMllo	1	† EsGtrDcy	1		
	26	SteelGtr	1	† Nashvlle	1	† NashvllR	1	† Nashvl12	2				
	27	Jazz Gtr	1	† SuperJzM	1	† SuperJzB	1	† SuperJzD	2	† SuperJzR	1	† DX JzGtr	1
	28	CleanGtr	1	CleanGt2 **	1	MidT.Gtr ***	1	MidTGtSt ***	1	NasalGtr ***	1	NaslGtSt ***	2
	29	Mute Gtr	1	† Wrench	1	† WrenchHv	1	† WrnchDbl	2	† Tin	2		
	30	Ovrdrive	1	† ManhttnM	1	† ManhttnB	1	† ManhttnD	2	† ManhttnP	2		
	31	Dist.Gtr	1	† Bite	1	† Bite Res	1	† Bite Dtd	2	† Bite +	2	† Burnout	2
	32	GtrHarmo	1	AcoHarmo **	1	GtFeedbk	1	GtrHrmo2	1	† Shimla	2		
Bass	33	Aco.Bass	1	† Boston	1	† BostnBrt	1	† Coolth	1	† Coolth B	1		
	34	FngrBass	1	Jazzy Ba **	1	Mod.Bass	2	† Chase	1	† ChaseRes	1	† BlueBass	1
	35	PickBass	1	† HardPick	1	† HrdPikRs	2	† PkBass +	2	PickBa 4	2		
	36	Fretless	1	† PwrFrtls	1	† PwrFrtlR	1	† TalkinBa	1	† NoizFrtl	2		
	37	SlapBas1	1	Slapper ***	1	Thum&Slp ***	2	† GltzySlp	2	† FM Slap	1	† FMSlpDtd	2
	38	SlapBas2	1										
	39	SynBass1	1	Orbiter	2	Sqr.Bass	2	RubberBa	2	Fish ***	1	HardReso ***	1
	40	SynBass2	2	X WireBa	2	AtkPulse ***	1	CS Light ***	1	MetlBass ***	1	† FrcOscBa	1
Strings	41	Violin	1	† Cadenza	1	† CadenzDk	1	†† Vln Sec	2	†† Hrd Vlns	2	†† Slw Vlns	1
	42	Viola	1	† Sonata	1	†† Vla Sec	2	†† Hrd Vlas	2	†† Slw Vlas	1		
	43	Cello	1	†† CelloSec	2	†† Hrd Vcs	2	†† Slw Vcs	1				
	44	Contrabs	1	†† CB Sec	2	†† Hrd CBs	2	†† Slw CBs	1				
	45	Trem.Str	1	† Fear	1	† Fear Dtd	2	† Apoclyps	2				
	46	Pizz.Str	1	†† Collegno	2								
	47	Harp	1	El.Harp	1								
	48	Timpani	1										
Ensemble	49	Strings1	1	† SprStrng	1	† SprStrSt	2	† Triste	1	† Basso	2	†† Stacc H	2
	50	Strings2	1	70s Str	1	Strings3	1						
	51	Syn Str1	2	Syn Str4	2	Syn Str5	2	† Solitude	2	† Fate	1	† Thulium	1
	52	Syn Str2	2	† Hope	2	† Virgo	2	† Platinum	1	† OctavPWM	2	† Taurus	2
	53	ChoirAah	1	StrngAah **	1	Male Aah **	1	† Scroll	2	† Scroll +	2		
	54	VoiceOoh	1	VoiceDoo **	1	† Hmn	1	† WrlChoir	2				
	55	SynVoice	1	AnaVoice	1	† Aspirate	1	† AsprateD	2	† Facula	2		
	56	Orch.Hit	2	Impact	2	BrssStab **	2	DoublHit **	2	BrStab80 **	2	Bass Hit ***	1
Brass	57	Trumpet	1	Dark Trp ***	1	DrkTpSft ***	1	† Soft Trp	1	† Blow	1	† Blow Dbl	2
	58	Trombone	1	BrghtTrb ***	1	MellowTb ***	1	† JJJ	1				
	59	Tuba	1										
	60	Mute Trp	1	MuteTrp2 **	1	† Bkstairs	1						
	61	Fr. Horn	1	† Syn Horn	1	HornOrc2	2						
	62	BrssSect	1	† SprBrass	2	† SprBrCut	1	† SprBrBlw	2	† Pwrd Sfz	2	† PwrSfzBr	2
	63	SynBrss1	2	AnaBrss1	2	† SynthThn	1	† SyncBrss	1	† SyncBrSt	2	† AnaHorn1	1
	64	SynBrss2	1	AnaBrss2	2	† Soft Cut	1	† AnaHornS	2				

🡇Continued on page 82🡇

(shaded box) : Same as Bank 0 E: Number of element

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Other Waves 6		Other Waves 7		Other Waves 8		Other Waves 9		Other Waves 10		Other Waves 11		Other Waves 12	
0		0		0		0		0		0		0	
69		70		71		72		73		74		75	
	E		E		E		E		E		E		E
† Soho	1	† FlopsDtd	2	† Diploid2	2	† Brooklyn	1	† Diploid3	2	PhunkyDX	2	† Nasal DX	1
† FliksDtd		† BrightDX	1	† BrtDXDtd	2	† Kitayama	2	† Turnpik1	2	Turnpik2	2	† Cerritos	1
† SprClavi	2	† GtrClavi	2	† HardyPlk	1	† HrdyPlk+	2	† FMClavDb	2				
StdiumO2 ***	2	GospelOr ***	1	ClkGsplO ***	2	ChapelOr ***	2	† DimChors	2	Dawn	1	† Mellorgn	2
† DimClick	2	† Dusk	2	† FM Click	1	† Spoony	1	† SprRotry	2	LoFiOrgn	2	† BeepOrgn	1
† DXJzGt D	2	† PulsJazz	1	† RghcastN	1	† RghcastM	1						
† Hammer M	1	† Hammer B	1	† Hammer D	2	† HammerSt	2	† FMChoGtr	2	FMChoGtS	2	† PeskyGtr	1
† Bombay	2	† Bombay S	2	† Jaipur	2								
JazzyBa2	2	FngBass3	2										
† Wah Saw	1	† Pluto	1	† Pluto +	2	† Stimuli	1	† RunPulse	1	TalkPuls	1	† Node	1
† Cubit	1	† Cubit +	2	† Keel	1	† KeelPwrd	2	† PlnPulse	2	PwrdPuls	1	† PwrPulsB	1
†† Stacc L	2	Hall Str	1	Str/FHrn	2								
† Brook	1	† Brook St	2	OldSynSt	2								
† Frost	2	† Leo	2	† SolPlexs	2	SunRise	2						
BassHit+ ***	2	6th Hit ***	1	6thHit + ***	2	Euro Hit ***	1	EuroHit+ ***	2	Blowout	2		
4th TP	2	Synth Tp	1										
† Alto&Trp	2	† Tnr&Trp	2	† BrssBros	2	† VagueBro	2	BrssSec3	2	SfrzdBr2	2	OctBrass	2
† AnaHorn2	1	† AnHrnOct	2	† SawBrPwr	2								

🡇Continued on page 83🡇

XG Voice List (Normal voices)

Bank Select LSB=Bank number

				Other Waves 13		Other Waves 14		Other Waves 15		Other Waves 16		Other Waves 17	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		76		77		78		79		80	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
Piano	1	GrandPno	1										
	2	BritePno	1										
	3	El.Grand	2										
	4	HnkyTonk	2										
	5	E.Piano1	2	† NaslDXDt	2	† Din	2						
	6	E.Piano2	2	† Sunset	1	† Soft DX	2	† Reso DX	1	† PiercnDX	2	† ShvrngDX	1
	7	Harpsi.	1										
	8	Clavi	2										
Chromatic Percussion	9	Celesta	1										
	10	Glocken	1										
	11	MusicBox	2										
	12	Vibes	1										
	13	Marimba	1										
	14	Xylophon	1										
	15	TubulBel	1										
	16	Dulcimer	1										
Organ	17	DrawOrgn	1	† Fuzzorgn	2	† FMO	1	70sDrOr3	2				
	18	PercOrgn	1	† Belief	2	† SnapOrgn	1						
	19	RockOrgn	2										
	20	ChrchOrg	2										
	21	ReedOrgn	1										
	22	Acordion	2										
	23	Harmnica	1										
	24	TangoAcd	2										
Guitar	25	NylonGtr	1										
	26	SteelGtr	1										
	27	Jazz Gtr	1										
	28	CleanGtr	1	† ClaviGtr	2								
	29	Mute Gtr	1										
	30	Ovrdrive	1										
	31	Dist.Gtr	1										
	32	GtrHarmo	1										
Bass	33	Aco.Bass	1										
	34	FngrBass	1										
	35	PickBass	1										
	36	Fretless	1										
	37	SlapBas1	1										
	38	SlapBas2	1										
	39	SynBass1	1	† Stainer	1	† StainAtk	1	† SweepSqr	1	† SwpSqr +	2	† Stinks	1
	40	SynBass2	2	† Pwrd Saw	1								
Strings	41	Violin	1										
	42	Viola	1										
	43	Cello	1										
	44	Contrabs	1										
	45	Trem.Str	1										
	46	Pizz.Str	1										
	47	Harp	1										
	48	Timpani	1										
Ensemble	49	Strings1	1										
	50	Strings2	1										
	51	Syn Str1	2										
	52	Syn Str2	2										
	53	ChoirAah	1										
	54	VoiceOoh	1										
	55	SynVoice	1										
	56	Orch.Hit	2										
Brass	57	Trumpet	1										
	58	Trombone	1										
	59	Tuba	1										
	60	Mute Trp	1										
	61	Fr. Horn	1										
	62	BrssSect	1										
	63	SynBrss1	2										
	64	SynBrss2	1										

🡇 Continued on page 84 🡇

(shaded box) : Same as Bank 0   E: Number of element

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Other Waves 18		Other Waves 19		Other Waves 20		Other Waves 21		Other Waves 22		Other Waves 23		Other Waves 24	
0		0		0		0		0		0		0	
81		82		83		84		85		86		87	
	E		E		E		E		E		E		E
† ShvrnDX+	1	† RattlnDX	1	† RatlnDX+	2	† TinkerDX	1	† TinkrDX+	2				
† StnksRes	1	† Reso Sqr	1	† Dagger	1	† Zinc	2	† SweePWM	2	† SwPWM St	2	† Slow Wah	1

🡇 Continued on page 85 🡇

XG Voice List (Normal voices)

Bank Select LSB=Bank number

				Other Waves 25		Other Waves 26		Other Waves 27		Other Waves 28		Other Instrument 1	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		88		89		90		91		96	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
Piano	1	GrandPno	1										
	2	BritePno	1										
	3	El.Grand	2										
	4	HnkyTonk	2										
	5	E.Piano1	2										
	6	E.Piano2	2										
	7	Harpsi.	1										
	8	Clavi	2										
Chromatic Percussion	9	Celesta	1										
	10	Glocken	1										
	11	MusicBox	2										
	12	Vibes	1										
	13	Marimba	1									Balafon **	2
	14	Xylophon	1										
	15	TubulBel	1									ChrchBel	2
	16	Dulcimer	1									Cimbalom	2
Organ	17	DrawOrgn	1										
	18	PercOrgn	1										
	19	RockOrgn	2										
	20	ChrchOrg	2										
	21	ReedOrgn	1										
	22	Acordion	2										
	23	Harmnica	1										
	24	TangoAcd	2										
Guitar	25	NylonGtr	1									Ukulele	1
	26	SteelGtr	1									Mandolin	2
	27	Jazz Gtr	1									PdlSteel **	1
	28	CleanGtr	1										
	29	Mute Gtr	1									Mu.DstGt **	2
	30	Ovrdrive	1										
	31	Dist.Gtr	1										
	32	GtrHarmo	1										
Bass	33	Aco.Bass	1									† WalkSyBa	1
	34	FngrBass	1										
	35	PickBass	1										
	36	Fretless	1									SynFretl	2
	37	SlapBas1	1										
	38	SlapBas2	1										
	39	SynBass1	1	† Crook	2	FstFltBa	1	Rubber30	1	FstResB2	1	Hammer	2
	40	SynBass2	2										
Strings	41	Violin	1										
	42	Viola	1										
	43	Cello	1										
	44	Contrabs	1										
	45	Trem.Str	1										
	46	Pizz.Str	1										
	47	Harp	1									† Vln Harp	1
	48	Timpani	1										
Ensemble	49	Strings1	1										
	50	Strings2	1										
	51	Syn Str1	2										
	52	Syn Str2	2										
	53	ChoirAah	1										
	54	VoiceOoh	1									VoiceHmn **	1
	55	SynVoice	1										
	56	Orch.Hit	2										
Brass	57	Trumpet	1									FluglHrn **	1
	58	Trombone	1										
	59	Tuba	1										
	60	Mute Trp	1										
	61	Fr. Horn	1										
	62	BrssSect	1										
	63	SynBrss1	2										
	64	SynBrss2	1										

🡇 Continued on page 86 🡇

(shaded box) : Same as Bank 0 E: Number of element

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Other Instrument 2		Other Instrument 3		Other Instrument 4		Other Instrument 5		Other Instrument 6		Capital Voices on MU100 Native Map		Capital Voices on MU Basic Map	
0		0		0		0		0		0		0	
97		98		99		100		101		126		127	
	E		E		E		E		E		E		E
										† GrandP #	1		
										† BriteP #	1		
										† EPiano1#	2		
										† EPiano2#	1		
										† Clavi #	2		
Balimba	2	Log Drum	2										
Carillon	2												
Santur	2	†† Yang Qin	2										
										† DrawOrg#	2		
										† PercOrg#	2		
										† RockOrg#	2		
										† TangoAc#	2		
										† NylonGt#	1		
† MndlnEns	2									† SteelGt#	1		
										† JazzGtr#	2		
										† MuteGtr#	2		
										† Ovrdriv#	2		
										† DistGtr#	1		
† Dim&Cool	1									† AcoBass#	1		
										† FngrBa #	1		
SmthFrtl	2									† Frtless#	1		
										† SlapBa1#	2		
										† SlapBa2#	2		
										† Violin #	1		
										† TremStr#	2		
† VlnHrpDt	2												
										† Strngs1#	1		
										† Strngs2#	1		
† Cornet	2									† Trumpet#	1		
										† Trmbone#	1		
										† MuteTrp#	2		
										† BrssSec#	2		

🡇 Continued on page 87 🡇

XG Voice List (Normal voices)

Bank Select LSB=Bank number

				MODEL EXCLUSIVE VOICE Timbre		Timbre, Poly		Timbre, Looped		Timbre, Looped, Poly		Phrase, Looped		Phrase, Looped, Poly		SFX, Timbre	
Bank Select MSB		0		48		48		48		48		48		48		48	
Bank Select LSB		0		0		8		16		24		48		56		64	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E		E		E
Piano	1	GrandPno	1	† MtdClavi	1	† Beeline	1	† Rage	1	† Fuss	1	† Reflex 1	2	† Insanity	2	† DstnFire	2
	2	BritePno	1	† Orimba	2	† BlineHrd	2	† TnglCaos	1	† VanAllen	1	† Reflex 2	2	† Habakkuk	2	† BlowNoiz	1
	3	El.Grand	2			† Dwarf	2	† Incontnc	1	† Divinity	2	† Prcesion	2			† Fall	1
	4	HnkyTonk	2			† Byte	1	† IncntClk	1	† Paranoia	1	† RndmWalk	1			† Chaff	2
	5	E.Piano1	2			† Ping	1	† CheapOsc	1	† Vexation	1	† RandmRun	1				
	6	E.Piano2	2			† NastyCut	1	† CheapOc+	2	† CalcOrg1	1						
	7	Harpsi.	1			† NstyCtSt	2	† NstOrSpl	2	† CalcOrg2	2						
	8	Clavi	2			† Xe	1	† SprClick	1	† CalcOrg3	2						
Chromatic Percussion	9	Celesta	1			† OrganHit	1	† Boomout	2	† ChoCalcO	2						
	10	Glocken	1			† OrgnHit+	2	† ChoirSpl	2	† Sodium	2						
	11	MusicBox	2			† Soft Hit	1	† Veld	2								
	12	Vibes	1			† Vein	1	† VaporVox	1								
	13	Marimba	1			† Packet	1	† VoxShoot	2								
	14	Xylophon	1			† Jolly	1	† SemiacOr	2								
	15	TubulBel	1			† Jolly +	2										
	16	Dulcimer	1			† Envy	1										
Organ	17	DrawOrgn	1			† EnvyShrt	2										
	18	PercOrgn	1			† Cough	1										
	19	RockOrgn	2			† Remark	2										
	20	ChrchOrg	2			† Potala	2										
	21	ReedOrgn	1			† Fury	2										
	22	Acordion	2			† Glocken+	1										
	23	Harmnica	1														
	24	TangoAcd	2														
Guitar	25	NylonGtr	1														
	26	SteelGtr	1														
	27	Jazz Gtr	1														
	28	CleanGtr	1														
	29	Mute Gtr	1														
	30	Ovrdrive	1														
	31	Dist.Gtr	1														
	32	GtrHarmo	1														
Bass	33	Aco.Bass	1														
	34	FngrBass	1														
	35	PickBass	1														
	36	Fretless	1														
	37	SlapBas1	1														
	38	SlapBas2	1														
	39	SynBass1	1														
	40	SynBass2	2														
Strings	41	Violin	1														
	42	Viola	1														
	43	Cello	1														
	44	Contrabs	1														
	45	Trem.Str	1														
	46	Pizz.Str	1														
	47	Harp	1														
	48	Timpani	1														
Ensemble	49	Strings1	1														
	50	Strings2	1														
	51	Syn Str1	2														
	52	Syn Str2	2														
	53	ChoirAah	1														
	54	VoiceOoh	1														
	55	SynVoice	1														
	56	Orch.Hit	2														
Brass	57	Trumpet	1														
	58	Trombone	1														
	59	Tuba	1														
	60	Mute Trp	1														
	61	Fr. Horn	1														
	62	BrssSect	1														
	63	SynBrss1	2														
	64	SynBrss2	1														

🡇 Continued on page 88 🡇

(shaded) : No sound   E: Number of elements

** : MU80 Extension   † : MU100 Extension

*** : MU90 Extension   †† : MU128 Extension

SFX, Timbre, Poly		SFX, Phrase		SFX, Phrase, Poly		Rhythm, Timbre		Rhythm, Timbre, Poly		Rhythm, Phrase, Poly	
48		48		48		48		48		48	
72		80		88		96		104		120	
	E		E		E		E		E		E
† Litning	2	† Zipzap	1	† Escape	2	† TinKettl	2	† Satya	1	† Vodou	1
† Oof	2			† Zigzag	2	† K/S Anlg	2	† Monastry	2		
† Lust	1			† Scud	2	† K/S Humd	2	† Vinaya	2		
† Lust St	2			† Hinayana	2	† K/S Slap	2	† Prana	2		
† SoftHit+	2			† Boot	2	† Rvr/Crsh	2	† Delight	2		
† Cough +	2			† Anathema	2			† Puja	2		
† Ruin	1			† Germ 1	2			† Bent Tom	2		
† Ruin St	2			† Germ 2	2						
† Vein +	2			† Malfnctn	2						
† Universe	1										
† UnvrsSwp	2										
† Xe +	2										
† Daze	2										
† Refusal	1										
† Refusal+	2										
† Lie	1										
† Malice	2										
† Doubt	1										
† DoubtDbl	2										

🠋 Continued on page 89 🠋

SFX

Bank Select MSB		64	
Bank Select LSB		0	
Instrument Group	Pgm # (1-128)		E
	1	CuttngNz	1
	2	CttngNz2	2
	3	DstCutNz **	2
	4	Str Slap	1
	5	B.Slide **	2
	6	P.Scrape **	1
	7		
	8		
	9		
	10		
	11		
	12		
	13		
	14		
	15		
	16		
	17	Fl.KClik	1
	18		
	19		
	20		
	21		
	22		
	23		
	24		
	25		
	26		
	27		
	28		
	29		
	30		
	31		
	32		
	33	Shower	2
	34	Thunder	1
	35	Wind	1
	36	Stream	2
	37	Bubble	2
	38	Feed **	2
	39	† Cave	2
	40		
	41		
	42		
	43		
	44		
	45		
	46		
	47		
	48		
	49	Dog	1
	50	Horse	1
	51	Tweet 2	1
	52	Kitty **	1
	53	Growl **	1
	54	Haunted **	2
	55	Ghost	2
	56	Maou **	2
	57	† Insects	2
	58	† Bacteria	2
	59		
	60		
	61		
	62		
	63		
	64		

🠋

XG Voice List (Normal voices)

Bank Select LSB=Bank number

						Key Scale Panning		Stereo		Single		Slow		Fast Decay	
Bank Select MSB		0		0		0		0		0		0		0	
Bank Select LSB		0		0		1		3		6		8		12	
Instrument Group	Pgm # (1-128)	Mu basic	E	MU100 Native	E		E		E		E		E		E
🡇 Continued on page 62 🡇															
Reed	65	SprnoSax	1									† VgSprnSx	1		
	66	Alto Sax	1	† AltoSax#	2										
	67	TenorSax	1												
	68	Bari.Sax	1												
	69	Oboe	2	† Oboe #	1										
	70	Eng.Horn	1												
	71	Bassoon	1												
	72	Clarinet	1												
Pipe	73	Piccolo	1												
	74	Flute	1	† Flute #	1										
	75	Recorder	1												
	76	PanFlute	1	† PanFlut#	1										
	77	Bottle	2												
	78	Shakhchi	2												
	79	Whistle	1												
	80	Ocarina	1												
Synth Lead	81	SquareLd	2							SquarLd2	1	LMSquare	2		
	82	Saw Ld	2							Saw Ld 2	1	ThickSaw	2		
	83	CaliopLd	2												
	84	Chiff Ld	2												
	85	CharanLd	2												
	86	Voice Ld	2												
	87	Fifth Ld	2									† FifthLdS	2		
	88	Bass&Ld	2												
Synth Pad	89	NewAgePd	2												
	90	Warm Pad	2												
	91	PolySyPd	2												
	92	ChoirPad	2												
	93	BowedPad	2												
	94	MetalPad	2												
	95	Halo Pad	2												
	96	SweepPad	2												
Synth Effects	97	Rain	2												
	98	SoundTrk	2												
	99	Crystal	2											SynDrCmp	2
	100	Atmosphr	2												
	101	Bright	2												
	102	Goblins	2												
	103	Echoes	2									Echoes 2	2		
	104	Sci-Fi	2												
Ethnic	105	Sitar	1												
	106	Banjo	1												
	107	Shamisen	1												
	108	Koto	1												
	109	Kalimba	1												
	110	Bagpipe	2												
	111	Fiddle	1												
	112	Shanai	1												
Percussive	113	TnklBell	2												
	114	Agogo	2												
	115	SteelDrm	2												
	116	Woodblok	1												
	117	TaikoDrm	1												
	118	MelodTom	2												
	119	Syn Drum	1												
	120	RevCymbl	1												
Sound Effects	121	FretNoiz	2												
	122	BrthNoiz	2												
	123	Seashore	2												
	124	Tweet	2												
	125	Telphone	1												
	126	Helicptr	1												
	127	Applause	1												
	128	Gunshot	1												

(shaded box) : Same as Bank 0

E: Number of elements

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Double Attack		Bright 1		Bright 2		Dark 1		Dark 2		Resonant		LFO-Cutoff Freq	
0		0		0		0		0		0		0	
14		16		17		18		19		20		21	
	E		E		E		E		E		E		E

🠋 Continued on page 63 🠋

						† ASax Lgt	1						
						Hollow	1	Shroud	2				
						Dyna Saw	1	Digi Saw	2	Big Lead	2		
		Big&Low	2										
		ThickPad	2	Soft Pad	2	Sine Pad	2						
										Shwimmer	2		
Popcorn	2					TinyBell	2						
						WarmAtms	2	HollwRls	2				
Echo Pan	2												

XG Voice List (Normal voices)

Bank Select LSB=Bank number

				Vel-cutoff freq		Attack		Release		Sweep		Resonant Sweep	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		22		24		25		26		27	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
Continued on page 64													
Reed	65	SprnoSax	1										
	66	Alto Sax	1										
	67	TenorSax	1										
	68	Bari.Sax	1										
	69	Oboe	2										
	70	Eng.Horn	1										
	71	Bassoon	1										
	72	Clarinet	1										
Pipe	73	Piccolo	1										
	74	Flute	1										
	75	Recorder	1										
	76	PanFlute	1										
	77	Bottle	2										
	78	Shakhchi	2										
	79	Whistle	1										
	80	Ocarina	1										
Synth Lead	81	SquareLd	2										
	82	Saw Ld	2			HeavySyn	2	WaspySyn	2	Mondo ***	1	RezzySaw ***	1
	83	CaliopLd	2										
	84	Chiff Ld	2										
	85	CharanLd	2										
	86	Voice Ld	2			SynthAah	2						
	87	Fifth Ld	2										
	88	Bass&Ld	2										
Synth Pad	89	NewAgePd	2										
	90	Warm Pad	2										
	91	PolySyPd	2										
	92	ChoirPad	2										
	93	BowedPad	2										
	94	MetalPad	2										
	95	Halo Pad	2										
	96	SweepPad	2									Converge	2
Synth Effects	97	Rain	2										
	98	SoundTrk	2									Prologue	2
	99	Crystal	2										
	100	Atmosphr	2										
	101	Bright	2										
	102	Goblins	2										
	103	Echoes	2										
	104	Sci-Fi	2										
Ethnic	105	Sitar	1										
	106	Banjo	1										
	107	Shamisen	1										
	108	Koto	1										
	109	Kalimba	1										
	110	Bagpipe	2										
	111	Fiddle	1										
	112	Shanai	1										
Percussive	113	TnklBell	2										
	114	Agogo	2										
	115	SteelDrm	2										
	116	Woodblok	1										
	117	TaikoDrm	1										
	118	MelodTom	2										
	119	Syn Drum	1										
	120	RevCymbl	1										
Sound Effects	121	FretNoiz	2										
	122	BrthNoiz	2										
	123	Seashore	2										
	124	Tweet	2										
	125	Telphone	1										
	126	Helicptr	1										
	127	Applause	1										
	128	Gunshot	1										

(shaded box) : Same as Bank 0 E: Number of elements

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Muted		Complex-FEG		Detune 1		Detune 2		Detune 3		Octave 1		Octave 2	
0		0		0		0		0		0		0	
28		29		32		33		34		35		36	
	E		E		E		E		E		E		E
Continued on page 65													
										2 Osc ***	2		
				DoublSaw ***	2					Toy Lead ***	2	Dim Saw ***	2
										Big Five	2		
										RndGlock	2		
				DetSitar	2					Sitar 2	2		
MuteBnjo	1												

XG Voice List (Normal voices)

Bank Select LSB=Bank number

				5th 1		5th 2		Bend		Tutti 1		Tutti 2	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		37		38		39		40		41	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
⬇ Continued on page 66 ⬇													
Reed	65	SprnoSax	1										
	66	Alto Sax	1							Sax Sect	2		
	67	TenorSax	1							BrthTnSx	2	SoftTenr	2
	68	Bari.Sax	1										
	69	Oboe	2										
	70	Eng.Horn	1										
	71	Bassoon	1										
	72	Clarinet	1							† Syn&Clr	2		
Pipe	73	Piccolo	1										
	74	Flute	1							† Brthy Fl	2		
	75	Recorder	1										
	76	PanFlute	1										
	77	Bottle	2										
	78	Shakhchi	2										
	79	Whistle	1										
	80	Ocarina	1										
Synth Lead	81	SquareLd	2										
	82	Saw Ld	2							PulseSaw	2	Dr.Lead	2
	83	CaliopLd	2							† Novice	2		
	84	Chiff Ld	2							† SaltLead	2		
	85	CharanLd	2										
	86	Voice Ld	2										
	87	Fifth Ld	2										
	88	Bass&Ld	2										
Synth Pad	89	NewAgePd	2										
	90	Warm Pad	2							† Vishnu	2		
	91	PolySyPd	2										
	92	ChoirPad	2										
	93	BowedPad	2										
	94	MetalPad	2										
	95	Halo Pad	2							† Tiu	2		
	96	SweepPad	2										
Synth Effects	97	Rain	2										
	98	SoundTrk	2										
	99	Crystal	2							GlockChi	2	ClearBel	2
	100	Atmosphr	2							Nylon EP	2		
	101	Bright	2										
	102	Goblins	2										
	103	Echoes	2										
	104	Sci-Fi	2										
Ethnic	105	Sitar	1							† Bhuj	2		
	106	Banjo	1										
	107	Shamisen	1										
	108	Koto	1										
	109	Kalimba	1										
	110	Bagpipe	2										
	111	Fiddle	1										
	112	Shanai	1										
Percussive	113	TnklBell	2										
	114	Agogo	2										
	115	SteelDrm	2										
	116	Woodblok	1										
	117	TaikoDrm	1										
	118	MelodTom	2										
	119	Syn Drum	1										
	120	RevCymbl	1										
Sound Effects	121	FretNoiz	2										
	122	BrthNoiz	2										
	123	Seashore	2										
	124	Tweet	2										
	125	Telphone	1										
	126	Helicptr	1										
	127	Applause	1										
	128	Gunshot	1										

[shaded box] : Same as Bank 0 — E: Number of elements

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Tutti 3		Velocity Switch		Velocity Cross Fade		Detune 4		Tutti 4		Tutti 5		Tutti 6	
0		0		0		0		0		0		0	
42		43		45		48		52		53		54	
	E		E		E		E		E		E		E
🡇 Continued on page 67 🡇													
		HyprAlto	2										
				VeloLead	2								
				ClaviPad	2								
ChorBell	2												

XG Voice List (Normal voices)

Bank Select LSB=Bank number

				Other Waves 1		Other Waves 2		Other Waves 3		Other Waves 4		Other Waves 5	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		64		65		66		67		68	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
Reed	65	SprnoSax	1	† Mdtation	1	† MdtatnRs	1						
	66	Alto Sax	1	† ASaxPwrd	1	† FakeAlto	1	† FakeAlt+	2	† FakeAltD	2		
	67	TenorSax	1	TnrSax 2	1	† SprTenor	1	† SprTnr +	2	† SprTnrSt	2	† Tnr&Alto	2
	68	Bari.Sax	1										
	69	Oboe	2	† Heinz	1	† HeinzUni	2	Oboe Exp	1				
	70	Eng.Horn	1										
	71	Bassoon	1										
	72	Clarinet	1										
Pipe	73	Piccolo	1										
	74	Flute	1	† Boehm	1	† Boehm Br	2	† Pastoral	2	† Shepherd	2		
	75	Recorder	1	† Piplith	2	† Home	1						
	76	PanFlute	1	PanFlut2 **	1	† Meadow	1						
	77	Bottle	2	† BottlLgt	2								
	78	Shakhchi	2										
	79	Whistle	1	† Reverie	2								
	80	Ocarina	1	† Opalina	1								
Synth Lead	81	SquareLd	2	Mellow	2	SoloSine	2	SineLead	1	Pulse Ld ***	1	SyncLead ***	1
	82	Saw Ld	2	Digger ***	1	† Dunce	2	† BrassSaw	1	† SawRiver	2	† BrPulsDb	2
	83	CaliopLd	2	Vent Syn **	2	PureLead	2	† ElPrimtv	2				
	84	Chiff Ld	2	Rubby	2	HardSync ***	1						
	85	CharanLd	2	DistLead	2	WireLead	2	SynPluck ***	1				
	86	Voice Ld	2	Vox Lead	2	Br.Layer ***	2	† Cypher 1	1	† Cypher 2	1	† Cypher 3	2
	87	Fifth Ld	2										
	88	Bass&Ld	2	Fat&Prky	2	Soft Wrl	2	† Cant	2	† Mogul	1	† Distance	2
Synth Pad	89	NewAgePd	2	Fantasy	2	† Libra	2	Bell Pad	2				
	90	Warm Pad	2	Horn Pad	2	RotarStr	2						
	91	PolySyPd	2	PolyPd80	2	ClickPad	2	Ana. Pad	2	SquarPad	2	Snow Pad ***	2
	92	ChoirPad	2	Heaven	2	Lite Pad **	2	Itopia	2	CC Pad	2	CosmicPd ***	2
	93	BowedPad	2	Glacier	2	GlassPad	2	† SqrTwang	2	SquarPd8	2		
	94	MetalPad	2	Tine Pad	2	Pan Pad	2	† Queever	2				
	95	Halo Pad	2	† Aries	2	ChorusPd	2						
	96	SweepPad	2	PolarPad	2	Sweepy **	2	Celstial	2	† Monsoon	2	† Io	2
Synth Effects	97	Rain	2	HrmoRain	2	AfrcnWnd	2	Carib	2				
	98	SoundTrk	2	Ancestrl	2	Rave **	2	Fairy ***	2	† Hermit	2		
	99	Crystal	2	SynMalet	1	SftCryst	2	LoudGlok	2	ChrstBel	2	VibeBell	2
	100	Atmosphr	2	NylnHarp	2	Harp Vox	2	AtmosPad	2	Planet	2	† Lyra	2
	101	Bright	2	FantaBel	2	ShinStar	2	BritStab	2				
	102	Goblins	2	GobSynth	2	Creeper	2	Ring Pad	2	Ritual	2	ToHeaven	2
	103	Echoes	2	EchoBell	2	Big Pan	2	SynPiano	2	Creation	2	StarDust	2
	104	Sci-Fi	2	Starz	2	Odin **	2						
Ethnic	105	Sitar	1	† Raga Syn	2								
	106	Banjo	1	† El Banjo	1								
	107	Shamisen	1										
	108	Koto	1	† FM Koto	2								
	109	Kalimba	1	BigKalim **	2								
	110	Bagpipe	2	† Thistle	2								
	111	Fiddle	1										
	112	Shanai	1	Shanai 2	1								
Percussive	113	TnklBell	2	† TcklBell	2								
	114	Agogo	2										
	115	SteelDrm	2										
	116	Woodblok	1										
	117	TaikoDrm	1										
	118	MelodTom	2	Mel Tom2	1	Real Tom	2	Rock Tom	2				
	119	Syn Drum	1	Ana Tom	1	ElecPerc	2	Syn Perc	2				
	120	RevCymbl	1	Rev Cym2 **	1	Rev Cym3	1						
Sound Effects	121	FretNoiz	2										
	122	BrthNoiz	2										
	123	Seashore	2										
	124	Tweet	2										
	125	Telphone	1										
	126	Helicptr	1										
	127	Applause	1										
	128	Gunshot	1										

Continued on page 68

(shaded box) : Same as Bank 0

E: Number of elements

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Other Waves 6		Other Waves 7		Other Waves 8		Other Waves 9		Other Waves 10		Other Waves 11		Other Waves 12	
0		0		0		0		0		0		0	
69		70		71		72		73		74		75	
	E		E		E		E		E		E		E
⬇ Continued on page 69 ⬇													
† ForcdOsc	1	† Accent	1	† Brick	1	† Alum	2	† Query	2	† FMSlwSwp	2	† SyncLdDb	2
† Saw Trp	1	† Hue	1	† StrghtSw	1	† StrtPuls	1	† PWMania	1	† Mod Saw	1	† Toad	1
† SprCyphr	2												
† Sync B&L	1	Ba Lead	1										
† Pixie	2	† Pisces	2	† Spiral	2	PolySPd2	2	PolyPdKg	2				
DigiBell	2	AirBells	2	BellHarp	2	Gamelmba	2	† Bounce	2	Ana Bell	1		
† Akasaka	2	† DgBermda	2	Cloud Pd	2	PulseKey	2	NoisePno	2				
MilkyWay **	2	Night	2	Glisten	2	Puffy **	2	† Mimicry	2	† Parasite	2	† Cicada	2
Reso&Pan	2	Ana Echo	2										

XG Voice List (Normal voices)

Bank Select LSB=Bank number

				Other Waves 13		Other Waves 14		Other Waves 15		Other Waves 16		Other Waves 17	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		76		77		78		79		80	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
Continued on page 70													
Reed	65	SprnoSax	1										
	66	Alto Sax	1										
	67	TenorSax	1										
	68	Bari.Sax	1										
	69	Oboe	2										
	70	Eng.Horn	1										
	71	Bassoon	1										
	72	Clarinet	1										
Pipe	73	Piccolo	1										
	74	Flute	1										
	75	Recorder	1										
	76	PanFlute	1										
	77	Bottle	2										
	78	Shakhchi	2										
	79	Whistle	1										
	80	Ocarina	1										
Synth Lead	81	SquareLd	2	† Curse	2	† OctvBeep	1	Sine Ld2	1	SquarLd3	1	SquarLd4	1
	82	Saw Ld	2	† FatOctav	1	† Overdose	2	† PWMDecay	1	† SawDecay	1	FatSawLd	1
	83	CaliopLd	2										
	84	Chiff Ld	2										
	85	CharanLd	2										
	86	Voice Ld	2										
	87	Fifth Ld	2										
	88	Bass&Ld	2										
Synth Pad	89	NewAgePd	2										
	90	Warm Pad	2										
	91	PolySyPd	2										
	92	ChoirPad	2										
	93	BowedPad	2										
	94	MetalPad	2										
	95	Halo Pad	2										
	96	SweepPad	2										
Synth Effects	97	Rain	2										
	98	SoundTrk	2										
	99	Crystal	2										
	100	Atmosphr	2										
	101	Bright	2										
	102	Goblins	2	† Beacon	2								
	103	Echoes	2										
	104	Sci-Fi	2										
Ethnic	105	Sitar	1										
	106	Banjo	1										
	107	Shamisen	1										
	108	Koto	1										
	109	Kalimba	1										
	110	Bagpipe	2										
	111	Fiddle	1										
	112	Shanai	1										
Percussive	113	TnklBell	2										
	114	Agogo	2										
	115	SteelDrm	2										
	116	Woodblok	1										
	117	TaikoDrm	1										
	118	MelodTom	2										
	119	Syn Drum	1										
	120	RevCymbl	1										
Sound Effects	121	FretNoiz	2										
	122	BrthNoiz	2										
	123	Seashore	2										
	124	Tweet	2										
	125	Telphone	1										
	126	Helicptr	1										
	127	Applause	1										
	128	Gunshot	1										

(shaded box) : Same as Bank 0

E: Number of elements

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Other Waves 18		Other Waves 19		Other Waves 20		Other Waves 21		Other Waves 22		Other Waves 23		Other Waves 24	
0		0		0		0		0		0		0	
81		82		83		84		85		86		87	
	E		E		E		E		E		E		E
🠗 Continued on page 71 🠗													
DuckLead	1	BoostSaw	1	Mr.Saw	2	ThinSwLd	1	MouthSaw	1	Dr.Lead2	2	Saw Unis	2

XG Voice List (Normal voices)

Bank Select LSB=Bank number

				Other Waves 25		Other Waves 26		Other Waves 27		Other Waves 28		Other Instrument 1	
Bank Select MSB		0		0		0		0		0		0	
Bank Select LSB		0		88		89		90		91		96	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E		E
⬇ Continued on page 72 ⬇													
Reed	65	SprnoSax	1										
	66	Alto Sax	1										
	67	TenorSax	1										
	68	Bari.Sax	1										
	69	Oboe	2										
	70	Eng.Horn	1										
	71	Bassoon	1										
	72	Clarinet	1									BassClar **	1
Pipe	73	Piccolo	1									†† Bang Di	2
	74	Flute	1									†† Qu Di	1
	75	Recorder	1										
	76	PanFlute	1									Kawala **	2
	77	Bottle	2										
	78	Shakhchi	2										
	79	Whistle	1										
	80	Ocarina	1										
Synth Lead	81	SquareLd	2										
	82	Saw Ld	2	OctSawLd	2	Seq Saw1	2	Seq Saw2	1			Seq Ana.	2
	83	CaliopLd	2										
	84	Chiff Ld	2										
	85	CharanLd	2										
	86	Voice Ld	2										
	87	Fifth Ld	2										
	88	Bass&Ld	2										
Synth Pad	89	NewAgePd	2										
	90	Warm Pad	2										
	91	PolySyPd	2										
	92	ChoirPad	2										
	93	BowedPad	2										
	94	MetalPad	2										
	95	Halo Pad	2										
	96	SweepPad	2										
Synth Effects	97	Rain	2										
	98	SoundTrk	2										
	99	Crystal	2										
	100	Atmosphr	2										
	101	Bright	2									Smokey	2
	102	Goblins	2									BelChoir	2
	103	Echoes	2										
	104	Sci-Fi	2										
Ethnic	105	Sitar	1									Tambra	2
	106	Banjo	1									Rabab	2
	107	Shamisen	1									Tsugaru **	2
	108	Koto	1									Taisho-k	2
	109	Kalimba	1										
	110	Bagpipe	2									†† Sheng	1
	111	Fiddle	1									†† Er Hu	1
	112	Shanai	1									Pungi	1
Percussive	113	TnklBell	2									Bonang	2
	114	Agogo	2									Atrigane **	2
	115	SteelDrm	2									Tablas **	2
	116	Woodblok	1									Castanet	1
	117	TaikoDrm	1									Gr.Cassa	1
	118	MelodTom	2										
	119	Syn Drum	1										
	120	RevCymbl	1									RevSnar1 **	1
Sound Effects	121	FretNoiz	2										
	122	BrthNoiz	2										
	123	Seashore	2										
	124	Tweet	2										
	125	Telphone	1										
	126	Helicptr	1										
	127	Applause	1										
	128	Gunshot	1										

[shaded box] : Same as Bank 0 — E: Number of elements

** : MU80 Extension
*** : MU90 Extension
† : MU100 Extension
†† : MU128 Extension

Other Instrument 2		Other Instrument 3		Other Instrument 4		Other Instrument 5		Other Instrument 6		Capital Voices on MU100 Native Map		Capital Voices on MU Basic Map	
0		0		0		0		0		0		0	
97		98		99		100		101		126		127	
	E		E		E		E		E		E		E
⬇ Continued on page 73 ⬇													
										† AltoSax#	2		
										† Oboe #	1		
										† Flute #	1		
										† PanFlut#	1		
Dharma ***	2												
Tamboura	2												
Gopichnt	2	Oud	2	†† Pi Pa	2								
Kanoon	2	†† Zheng	1										
†† Ban Hu	1	†† Jing Hu	1										
Hichriki	2	†† Suo Na	2										
Altair	2	Gamelan	2	S.Gamlan	2	Rama Cym	2	AsianBel	2				
GlasPerc	2	ThaiBell	2										
RevSnar2 **	1	RevKick1 **	1	RevConBD **	1	Rev Tom1 **	1	Rev Tom2 **	1				

XG Voice List (Normal voices)

Bank Select LSB=Bank number

MODEL EXCLUSIVE VOICE

				Timbre		Timbre, Poly		Timbre, Looped		Timbre, Looped , Poly		Phrase, Looped		Phrase, Looped, Poly		SFX, Timbre	
Bank Select MSB		0		48		48		48		48		48		48		48	
Bank Select LSB		0		0		8		16		24		48		56		64	
Instrument Group	Pgm # (1-128)	Mu basic	E		E		E		E		E				E		E
				🡇 Continued on page 74 🡇													
Reed	65	SprnoSax	1														
	66	Alto Sax	1														
	67	TenorSax	1														
	68	Bari.Sax	1														
	69	Oboe	2														
	70	Eng.Horn	1														
	71	Bassoon	1														
	72	Clarinet	1														
Pipe	73	Piccolo	1														
	74	Flute	1														
	75	Recorder	1														
	76	PanFlute	1														
	77	Bottle	2														
	78	Shakhchi	2														
	79	Whistle	1														
	80	Ocarina	1														
Synth Lead	81	SquareLd	2														
	82	Saw Ld	2														
	83	CaliopLd	2														
	84	Chiff Ld	2														
	85	CharanLd	2														
	86	Voice Ld	2														
	87	Fifth Ld	2														
	88	Bass&Ld	2														
Synth Pad	89	NewAgePd	2														
	90	Warm Pad	2														
	91	PolySyPd	2														
	92	ChoirPad	2														
	93	BowedPad	2														
	94	MetalPad	2														
	95	Halo Pad	2														
	96	SweepPad	2														
Synth Effects	97	Rain	2														
	98	SoundTrk	2														
	99	Crystal	2														
	100	Atmosphr	2														
	101	Bright	2														
	102	Goblins	2														
	103	Echoes	2														
	104	Sci-Fi	2														
Ethnic	105	Sitar	1														
	106	Banjo	1														
	107	Shamisen	1														
	108	Koto	1														
	109	Kalimba	1														
	110	Bagpipe	2														
	111	Fiddle	1														
	112	Shanai	1														
Percussive	113	TnklBell	2														
	114	Agogo	2														
	115	SteelDrm	2														
	116	Woodblok	1														
	117	TaikoDrm	1														
	118	MelodTom	2														
	119	Syn Drum	1														
	120	RevCymbl	1														
Sound Effects	121	FretNoiz	2														
	122	BrthNoiz	2														
	123	Seashore	2														
	124	Tweet	2														
	125	Telphone	1														
	126	Helicptr	1														
	127	Applause	1														
	128	Gunshot	1														

(shaded box) : No sound   E: Number of elements

** : MU80 Extension   † : MU100 Extension

*** : MU90 Extension   †† : MU128 Extension

SFX, Timbre, Poly		SFX, Phrase		SFX, Phrase, Poly		Rhythm, Timbre		Rhythm, Timbre, Poly		Rhythm, Phrase, Poly	
48		48		48		48		48		48	
72		80		88		96		104		120	
	E		E		E		E		E		E

⬇ Continued on page 75 ⬇

SFX

Bank Select MSB		64	
Bank Select LSB		0	
Instrument Group	Pgm # (1-128)		E
⬇			
	65	PhonCall **	1
	66	DoorSqek	1
	67	DoorSlam	1
	68	ScratchC	1
	69	ScratchS **	2
	70	WindChim	1
	71	Telphon2	1
	72		
	73		
	74		
	75		
	76		
	77		
	78		
	79		
	80		
	81	CarElgnt	1
	82	CarTSqel	1
	83	Car Pass	1
	84	CarCrash	1
	85	Siren	2
	86	Train	1
	87	JetPlane	2
	88	Starship	2
	89	Burst	2
	90	Coaster	2
	91	Submarin	2
	92	† Cnectvty	2
	93	† Mystery	2
	94		
	95		
	96		
	97	Laugh	1
	98	Scream	1
	99	Punch	1
	100	Heart	1
	101	Footstep	1
	102	Applaus2 **	1
	103		
	104		
	105		
	106		
	107		
	108		
	109		
	110		
	111		
	112		
	113	MchinGun	1
	114	LaserGun	2
	115	Xplosion	2
	116	Firework	2
	117	† Fireball	2
	118		
	119		
	120		
	121		
	122		
	123		
	124		
	125		
	126		
	127		
	128		

TG300B Voice List (Normal voices)

Bank Select LSB=000, MSB=Bank number

Bank Select MSB		Bank 0	E	Bank 1	E	Bank 2	E	Bank 3	E	Bank 4	E	Bank 5	E
Instrument Group	Pgm #												
Piano	1	GrandPno	1										
	2	BritePno	1										
	3	El.Grand	2	ElGrPno1	2	ElGrPno2	2						
	4	HnkyTonk	2										
	5	E.Piano1	2										
	6	E.Piano2	2										
	7	Harpsi.	1	†† HarpsiDt	2								
	8	Clavi	2										
Chromatic Percussion	9	Celesta	1										
	10	Glocken	1										
	11	MusicBox	2										
	12	Vibes	1	HardVibe	2								
	13	Marimba	1										
	14	Xylophon	1										
	15	TubulBel	1										
	16	Dulcimer	1	Dulcimr2	2								
Organ	17	DrawOrgn	1	70sDrOr1	2								
	18	PercOrgn	1	70sPcOr1	2								
	19	RockOrgn	2										
	20	ChrchOrg	2										
	21	ReedOrgn	1										
	22	Acordion	2										
	23	Harmnica	1	Harmo. 2	2								
	24	TangoAcd	2										
Guitar	25	NylonGtr	1										
	26	SteelGtr	1										
	27	Jazz Gtr	1	MelloGtr	1								
	28	CleanGtr	1										
	29	Mute Gtr	1	Mu.DstGt **	2								
	30	Ovrdrive	1										
	31	Dist.Gtr	1	DistGtr2 **	2	DistGtr3 **	2						
	32	GtrHarmo	1										
Bass	33	Aco.Bass	1										
	34	FngrBass	1	FngBass2	2	Jazzy Ba **	1	†† JazzyBa2	2	†† FngBass3	2		
	35	PickBass	1	†† PickBa 2	1			†† PickBa 4	2				
	36	Fretless	1	Fretles2	2	Fretles3	2	Fretles4	2	SynFretl	2	SmthFrtl	2
	37	SlapBas1	1										
	38	SlapBas2	1										
	39	SynBass1	1	SynBa1Dk	1								
	40	SynBass2	2	ClkSynBa	2	ModulrBa	2	Seq Bass	2				
Strings	41	Violin	1										
	42	Viola	1										
	43	Cello	1										
	44	Contrabs	1										
	45	Trem.Str	1										
	46	Pizz.Str	1										
	47	Harp	1										
	48	Timpani	1										
Ensemble	49	Strings1	1	Slow Str	1	†† Hall Str	1						
	50	Strings2	1	70s Str	1								
	51	Syn Str1	2	Syn Str4	2			†† OldSynSt	2				
	52	Syn Str2	2			†† SunRise	2						
	53	ChoirAah	1										
	54	VoiceOoh	1										
	55	SynVoice	1										
	56	Orch.Hit	2	OrchHit2	2								
Brass	57	Trumpet	1	Trumpet2	1								
	58	Trombone	1	Trmbone2	2								
	59	Tuba	1	Tuba 2	1								
	60	Mute Trp	1										
	61	Fr. Horn	2	FrHorn 2	2	†† HornOrc2	2						
	62	BrssSect	1										
	63	SynBrss1	2	PolyBrss	2								
	64	SynBrss2	1	Soft Brs	2								

🡇 Continued on page 96 🡇

(shaded cell) Same as Bank 0

E: Number of elements
†† : MU128 Extension

Bank 6	E	Bank 7	E	Bank 8	E	Bank 9	E	Bank 10	E	Bank 11	E	Bank 12	E
				GrndPnoK	1								
				BritPnoK	1								
				ElGrPnoK	2								
				HnkyTnkK	2								
				Chor.EP1	2								
				Chor.EP2	2								
				Harpsi.3	2								
				Clavi K	1								
				Vibes K	1								
				MarimbaK	1								
				ChrchBel	2	Carillon	2						
				Cimbalom	2								
				DetDrwOr	2	70sDrOr2	2						
				DetPrcOr	2								
				RotaryOr	2								
				ChurOrg2	2								
				AccordIt	2								
				Ukulele	1								
				12StrGtr	2	Nyln&Stl	2						
				PdlSteel **	1								
				ChorusGt	2								
				FunkGtr1	2								
				FeedbkGt	2	FeedbGt2	2						
				GtFeedbk	1								
				MutePkBa	1								
				ResoSlap	1								
				AcidBass	1	FastResB	1	TechnoBa	2	†† FstFltBa	1		
				DX Bass	2	X WireBa	2						
				Slow Vln	1								
				SlwTrStr	1	Susp.Str	2						
				Orchestr	2	Orchstr2	2	TremOrch	2	ChoirStr	2	†† Str/FHrn	2
				LegatoSt	2	Warm Str	2	S.SlwStr	2				
				Syn Str3 **	2								
				S.Choir	2	MelChoir	2						
				SyVoice2	2								
				Impact	2	BrssStab **	2	DoublHit **	2				
				FlugIHrn **	1								
				FrHrSolo	1								
				BrssSec2	2	†† BrssSec3	2	†† SfrzdBr2	2				
				SynBrss3	2	Quack Br	2						
				SynBrss4	2								

🡇 Continued on page 97 🡇

TG300B Voice List (Normal voices)

Bank Select LSB=000, MSB=Bank number

Bank Select MSB		Bank 0	E	Bank 14	E	Bank 15	E	Bank 16	E	Bank 17	E
Instrument Group	Pgm #										
Piano	1	GrandPno	1					MelloGrP	1		
	2	BritePno	1								
	3	El.Grand	2								
	4	HnkyTonk	2								
	5	E.Piano1	2					VX El.P1	2		
	6	E.Piano2	2					VX El.P2	2		
	7	Harpsi.	1					Harpsi.K	1		
	8	Clavi	2								
Chromatic Percussion	9	Celesta	1								
	10	Glocken	1								
	11	MusicBox	2								
	12	Vibes	1								
	13	Marimba	1					Balafon **	2	Balimba	2
	14	Xylophon	1								
	15	TubulBel	1								
	16	Dulcimer	1								
Organ	17	DrawOrgn	1					60sDrOr1	2	60sDrOr2	2
	18	PercOrgn	1								
	19	RockOrgn	2					SloRotar	2		
	20	ChrchOrg	2					ChurOrg3	2		
	21	ReedOrgn	1								
	22	Acordion	2								
	23	Harmnica	1								
	24	TangoAcd	2								
Guitar	25	NylonGtr	1					NylonGt3	2		
	26	SteelGtr	1					Mandolin	2		
	27	Jazz Gtr	1								
	28	CleanGtr	1								
	29	Mute Gtr	1					FunkGtr2	2		
	30	Ovrdrive	1								
	31	Dist.Gtr	1					PowerGt2 **	2	PowerGt1 **	2
	32	GtrHarmo	1					AcoHarmo **	1		
Bass	33	Aco.Bass	1								
	34	FngrBass	1								
	35	PickBass	1								
	36	Fretless	1								
	37	SlapBas1	1								
	38	SlapBas2	1								
	39	SynBass1	1	†† Rubber30	1	†† FstResB2	1	ResoBass	1		
	40	SynBass2	2					RubberBa	2	SynBa2Dk	1
Strings	41	Violin	1								
	42	Viola	1								
	43	Cello	1								
	44	Contrabs	1								
	45	Trem.Str	1								
	46	Pizz.Str	1								
	47	Harp	1					†† El.Harp	1		
	48	Timpani	1								
Ensemble	49	Strings1	1					S.Strngs	2		
	50	Strings2	1								
	51	Syn Str1	2								
	52	Syn Str2	2								
	53	ChoirAah	1								
	54	VoiceOoh	1								
	55	SynVoice	1								
	56	Orch.Hit	2					LoFi Hit	2		
Brass	57	Trumpet	1					†† 4th TP	2		
	58	Trombone	1								
	59	Tuba	1								
	60	Mute Trp	1								
	61	Fr. Horn	2					HornOrch	2		
	62	BrssSect	1					BrssFall **	1		
	63	SynBrss1	2					AnaBrss1	2		
	64	SynBrss2	1					AnaBrss2	2	VelBrss2	2

🡇 Continued on page 98 🡇

(shaded cell) Same as Bank 0

E: Number of elements
†† : MU128 Extension

Bank 18	E	Bank 19	E	Bank 24	E	Bank 25	E	Bank 26	E	Bank 27	E
				60sEl.P1	1	HardEl.P	2	MelloEP1	2		
				DX Hard	2						
				Harpsi.2	2						
				Log Drum	2						
60sDrOr3	2	†† 70sDrOr3	2	CheezOrg	2						
				FstRotar	2						
				OrgFlute	2						
				VelGtHrm	2						
Dst.5ths **	2			RckRthm2 **	2	RckRthm1 **	2				
MelloSB1	1	SmthSynB	2								
				Velo.Str	2						
				BriteTrp	2	Warm Trp	2				
				†† OctBrass	2						

🡇 Continued on page 99 🡇

Bank Select MSB		Bank 0	E	Bank 29	E	Bank 30	E	Bank 31	E	Bank 32	E	Bank 33	E
Instrument Group	Pgm #												
Piano	1	GrandPno	1										
	2	BritePno	1										
	3	El.Grand	2										
	4	HnkyTonk	2										
	5	E.Piano1	2							El.Pno1K	1		
	6	E.Piano2	2							El.Pno2K	1		
	7	Harpsi.	1										
	8	Clavi	2										
Chromatic Percussion	9	Celesta	1										
	10	Glocken	1										
	11	MusicBox	2										
	12	Vibes	1										
	13	Marimba	1										
	14	Xylophon	1										
	15	TubulBel	1										
	16	Dulcimer	1										
Organ	17	DrawOrgn	1							DrawOrg2	2	Even Bar	2
	18	PercOrgn	1							PercOrg2	2		
	19	RockOrgn	2										
	20	ChrchOrg	2							TrmOrgFl	2		
	21	ReedOrgn	1										
	22	Acordion	2										
	23	Harmnica	1										
	24	TangoAcd	2										
Guitar	25	NylonGtr	1							NylonGt2	1		
	26	SteelGtr	1							SteelGt2	1		
	27	Jazz Gtr	1										
	28	CleanGtr	1										
	29	Mute Gtr	1										
	30	Ovrdrive	1										
	31	Dist.Gtr	1										
	32	GtrHarmo	1										
Bass	33	Aco.Bass	1										
	34	FngrBass	1										
	35	PickBass	1										
	36	Fretless	1										
	37	SlapBas1	1										
	38	SlapBas2	1										
	39	SynBass1	1										
	40	SynBass2	2										
Strings	41	Violin	1										
	42	Viola	1										
	43	Cello	1										
	44	Contrabs	1										
	45	Trem.Str	1										
	46	Pizz.Str	1										
	47	Harp	1										
	48	Timpani	1										
Ensemble	49	Strings1	1										
	50	Strings2	1										
	51	Syn Str1	2										
	52	Syn Str2	2										
	53	ChoirAah	1							Ch.Aahs2	2		
	54	VoiceOoh	1										
	55	SynVoice	1										
	56	Orch.Hit	2										
Brass	57	Trumpet	1							†† Synth Tp	1		
	58	Trombone	1										
	59	Tuba	1										
	60	Mute Trp	1										
	61	Fr. Horn	2										
	62	BrssSect	1										
	63	SynBrss1	2										
	64	SynBrss2	1										

🡇 Continued on page 100 🡇

(shaded) Same as Bank 0

E: Number of elements
†† : MU128 Extension

Bank 34	E	Bank 35	E	Bank 40	E	Bank 41	E	Bank 126	E	Bank 127	E
								A-Piano1	2	a.piano1	1
								A-Piano2	2	a.piano2	1
								A-Piano3	2	a.piano3	1
								A-Piano4	2	e.piano1	1
								A-Piano5	1	e.piano2	1
								A-Piano6	1	e.piano3	1
								A-Piano7	1	e.piano4	1
								E-Piano1	2	hnkytnk	2
								E-Piano2	2	e.organ1	2
								E-Piano3	2	e.organ2	2
								A-Guitr1	1	e.organ3	1
								A-Guitr2	2	e.organ4	1
								A-Guitr3	2	pipeorg1	2
								E-Guitr1	2	pipeorg2	2
								E-Guitr2	1	pipeorg3	2
								Slap-1	2	acordion	2
				Organ Ba	1			Slap-2	2	harpsi1	1
								Slap-3	2	harpsi2	2
								Slap-4	2	harpsi3	1
								Slap-5	2	clavi1	1
								Slap-6	2	clavi2	1
								Slap-7	2	clavi3	1
								Slap-8	2	celesta1	1
								Finger-1	1	celesta2	1
				Requinto	1			Finger-2	2	synbras1	2
								Picked-1	1	synbras2	2
								Picked-2	2	synbras3	2
								FretlsBs	1	synbras4	2
								A-Bass	2	synbass1	1
								Choir-1	1	synbass2	1
								Choir-2	1	synbass3	2
								Choir-3	2	synbass4	1
								Choir-4	2	newagepd	2
								Strngs-1	2	synharmo	2
								Strngs-2	2	choir pd	2
								Strngs-3	2	bowed pd	2
								Strngs-4	2	soundtrk	2
								E-Organ1	2	atmosphr	2
								E-Organ2	2	syn warm	2
								E-Organ3	2	synfunny	1
								E-Organ4	2	synecho1	2
								E-Organ5	2	rain	2
								E-Organ6	2	synoboe	2
								E-Organ7	2	synecho2	2
								E-Organ8	2	synsolo	2
								E-Organ9	2	synrdorg	2
								SoftTP-1	1	synbell	1
								SoftTP-2	1	squareld	2
								TP/TRB-1	1	strsect1	2
								TP/TRB-2	1	strsect2	2
								TP/TRB-3	1	strsect3	2
								TP/TRB-4	1	pizz.str	1
								TP/TRB-5	2	violin 1	2
								TP/TRB-6	2	violin 2	1
								Sax-1	1	cello 1	1
								Sax-2	1	cello 2	1
								Sax-3	1	contrabs	1
								Sax-4	2	harp 1	1
								Brass-1	1	harp 2	1
								Brass-2	1	guitar 1	1
								Brass-3	2	guitar 2	1
								Brass-4	2	elecgtr1	2
								Brass-5	2	elecgtr2	2
								Orch-Hit	1	sitar	1

🡇Continued on page 101🡇

TG300B Voice List (Normal voices)

Bank Select MSB=000, LSB=Bank number

Bank Select MSB		Bank 0	E	Bank 1	E	Bank 2	E	Bank 3	E	Bank 4	E	Bank 5	E
Instrument Group	Pgm #												
🡇 Continued on page 90 🡇													
Reed	65	SprnoSax	1										
	66	Alto Sax	1										
	67	TnrSax 2	1										
	68	Bari.Sax	1										
	69	Oboe	2										
	70	Eng.Horn	1										
	71	Bassoon	1										
	72	Clarinet	1										
Pipe	73	Piccolo	1										
	74	Flute	1										
	75	Recorder	1										
	76	PanFlute	1										
	77	Bottle	2										
	78	Shakhchi	2										
	79	Whistle	1										
	80	Ocarina	1										
Synth Lead	81	SquareLd	2	SquarLd2	1	Hollow	1	Mellow	2	SoloSine	2	Shroud	2
	82	Saw Ld	2	Saw Ld 2	1	PulseSaw	2	ThickSaw	2	Big Lead	2	VeloLead	2
	83	CaliopLd	2	Vent Syn **	2	PureLead	2						
	84	Chiff Ld	2										
	85	CharanLd	2										
	86	Voice Ld	2										
	87	Fifth Ld	2	Big Five	2								
	88	Bass&Ld	2	Big&Low	2	Fat&Prky	2			†† Ba Lead	1		
Synth Pad	89	NewAgePd	2	Fantasy2	2	†† Bell Pad	2						
	90	Warm Pad	2	ThickPad	2	Horn Pad	2	RotarStr	2	Soft Pad	2		
	91	PolySyPd	2	PolyPd80	2	†† PolySPd2	2	†† PolyPdKg	2				
	92	ChoirPad	2	Heaven 2	2								
	93	BowedPad	2			†† SquarPd8	2						
	94	MetalPad	2	Tine Pad	2	Pan Pad	2						
	95	Halo Pad	2	†† ChorusPd	2								
	96	SweepPad	2	PolarPad	2								
Synth Effects	97	Rain	2	HrmoRain	2	AfrcnWnd	2						
	98	SoundTrk	2	Ancestrl	2	Prologue	2						
	99	Crystal	2	SynMalet	1	SftCryst	2	RndGlock	2	LoudGlok	2	GlockChi	2
	100	Atmosphr	2	WarmAtms	2	NylnHarp	2	Harp Vox	2	HollwRls	2	Nylon EP	2
	101	Bright	2	†† ShinStar	2	†† BritStab	2						
	102	Goblins	2	GobSynth	2	Creeper	2						
	103	Echoes	2	EchoBell	2	Echo Pan	2	EchoPad2	2	Big Pan	2	Reso&Pan	2
	104	Sci-Fi	2	Starz	2								
Ethnic	105	Sitar	1	Sitar 2	2	DetSitar	2						
	106	Banjo	1	MuteBnjo	1								
	107	Shamisen	1	Tsugaru **	2								
	108	Koto	1										
	109	Kalimba	1										
	110	Bagpipe	2										
	111	Fiddle	1										
	112	Shanai	1	Shanai 2	1								
Percussive	113	TnklBell	2										
	114	Agogo	2										
	115	SteelDrm	2										
	116	Woodblok	1										
	117	TaikoDrm	1										
	118	MelodTom	2	Real Tom	2								
	119	Syn Drum	1										
	120	RevCymbl	1	Rev Cym2 **	1	†† Rev Cym3	1						
Sound Effects	121	FretNoiz	2	CuttngNz	1	Str Slap	1	CttngNz2	2	DstCutNz **	2	B.Slide **	2
	122	BrthNoiz	2	Fl.KClik	1								
	123	Seashore	2	Shower	1	Thunder	1	Wind	1	Stream	2	Bubble	2
	124	Tweet	2	Dog	1	Horse	1	Tweet 2	1	Kitty **	1	Growl **	1
	125	Telphone	1	Call **	1	DoorSqek	1	DoorSlam	1	ScratchC	1	WindChim	1
	126	Helicptr	1	Ignition	1	Squeal	1	Exhaust	1	Crash	1	Siren	2
	127	Applause	1	Laugh	1	Scream	1	Punch	1	Heart	1	Footstep	1
	128	Gunshot	1	MchinGun	1	LaserGun	2	Xplosion	2				

(shaded cell) Same as Bank 0

E: Number of elements
†† : MU128 Extension

Bank 6	E	Bank 7	E	Bank 8	E	Bank 9	E	Bank 10	E	Bank 11	E	Bank 12	E

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Bank 6	E	Bank 7	E	Bank 8	E	Bank 9	E	Bank 10	E	Bank 11	E	Bank 12	E
				HyprAlto	2								
				BrthTnSx	2								
				†† Oboe Exp	1								
				BassClar **	1								
				Kawala **	2								
LMSquare	2			SineLead	1	†† Sine Ld2	1						
HeavySyn	2	Dyna Saw	1	Dr.Lead	2	†† FatSawLd	1						
				DistLead	2								
				Converge	2	Shwimmer	2	Celstial	2				
				ClaviPad	2								
				Rave **	2								
ClearBel	2	ChrstBel	2	VibeBell	2	DigiBell	2			†† Ana Bell	1		
AtmosPad	2	†† Cloud Pd	2	†† PulseKey	2	†† NoisePno	2						
SynPiano	2			†† Ana Echo	2								
				Tambra	2								
				Rabab	2								
				Taisho-k	2								
				Pungi	1								
				Bonang	2	Altair	2	Gamelan	2	S.Gamlan	2		
				Atrigane **	2								
				Castanet	1								
				Gr.Cassa	1								
				Mel Tom2	1	Rock Tom	2						
				Ana Tom	1	ElecPerc	2	†† Syn Perc	2				
				RevSnar1 **	1	RevSnar2 **	1						
P.Scrape **	1												
		ScratchS **	2										
Train	1	JetPlane	2	Starship	2	Burst	2						

TG300B Voice List (Normal voices)

Bank Select MSB=000, LSB=Bank number

Bank Select MSB		Bank 0	E	Bank 14	E	Bank 15	E	Bank 16	E	Bank 17	E
Instrument Group	Pgm #										
🡇 Continued on page 92 🡇											
Reed	65	SprnoSax	1								
	66	Alto Sax	1								
	67	TnrSax 2	1								
	68	Bari.Sax	1								
	69	Oboe	2								
	70	Eng.Horn	1								
	71	Bassoon	1								
	72	Clarinet	1								
Pipe	73	Piccolo	1								
	74	Flute	1								
	75	Recorder	1								
	76	PanFlute	1								
	77	Bottle	2								
	78	Shakhchi	2								
	79	Whistle	1								
	80	Ocarina	1								
Synth Lead	81	SquareLd	2					†† SquarLd4	1		
	82	Saw Ld	2					WaspySyn	2	†† DuckLead	1
	83	CaliopLd	2								
	84	Chiff Ld	2								
	85	CharanLd	2								
	86	Voice Ld	2								
	87	Fifth Ld	2								
	88	Bass&Ld	2								
Synth Pad	89	NewAgePd	2								
	90	Warm Pad	2								
	91	PolySyPd	2								
	92	ChoirPad	2								
	93	BowedPad	2								
	94	MetalPad	2								
	95	Halo Pad	2								
	96	SweepPad	2								
Synth Effects	97	Rain	2								
	98	SoundTrk	2								
	99	Crystal	2					ChorBell	2	AirBells	2
	100	Atmosphr	2								
	101	Bright	2								
	102	Goblins	2								
	103	Echoes	2								
	104	Sci-Fi	2								
Ethnic	105	Sitar	1					Tamboura	2		
	106	Banjo	1					Gopichnt	2		
	107	Shamisen	1								
	108	Koto	1					Kanoon	2		
	109	Kalimba	1								
	110	Bagpipe	2								
	111	Fiddle	1								
	112	Shanai	1					Hichriki	2		
Percussive	113	TnklBell	2					Rama Cym	2		
	114	Agogo	2								
	115	SteelDrm	2								
	116	Woodblok	1								
	117	TaikoDrm	1								
	118	MelodTom	2								
	119	Syn Drum	1								
	120	RevCymbl	1					RevKick1 **	1	RevConBD **	1
Sound Effects	121	FretNoiz	2								
	122	BrthNoiz	2								
	123	Seashore	2								
	124	Tweet	2								
	125	Telphone	1								
	126	Helicptr	1					Coaster	2		
	127	Applause	1								
	128	Gunshot	1								

[shaded cell]: Same as Bank 0

E: Number of elements
†† : MU128 Extension

Bank 18	E	Bank 19	E	Bank 24	E	Bank 25	E	Bank 26	E	Bank 27	E

🡇 Continued on page 93 🡇

†† SquarLd3	1										
										†† BoostSaw	1
BellHarp	2	GameImba	2								
				Oud	2						
				Rev Tom1 **	1	Rev Tom2 **	1				

Bank Select MSB		Bank 0	E	Bank 29	E	Bank 30	E	Bank 31	E	Bank 32	E	Bank 33	E
Instrument Group	Pgm #												

🡇 Continued on page 94 🡇

Instrument Group	Pgm #	Bank 0	E	Bank 29	E	Bank 30	E	Bank 31	E	Bank 32	E	Bank 33	E
Reed	65	SprnoSax	1										
	66	Alto Sax	1										
	67	TnrSax 2	1										
	68	Bari.Sax	1										
	69	Oboe	2										
	70	Eng.Horn	1										
	71	Bassoon	1										
	72	Clarinet	1										
Pipe	73	Piccolo	1										
	74	Flute	1										
	75	Recorder	1										
	76	PanFlute	1										
	77	Bottle	2										
	78	Shakhchi	2										
	79	Whistle	1										
	80	Ocarina	1										
Synth Lead	81	SquareLd	2										
	82	Saw Ld	2	†† Mr.Saw	2	†† ThinSwLd	1	†† MouthSaw	1			†† Dr.Lead2	2
	83	CaliopLd	2										
	84	Chiff Ld	2										
	85	CharanLd	2										
	86	Voice Ld	2										
	87	Fifth Ld	2										
	88	Bass&Ld	2										
Synth Pad	89	NewAgePd	2										
	90	Warm Pad	2										
	91	PolySyPd	2										
	92	ChoirPad	2										
	93	BowedPad	2										
	94	MetalPad	2										
	95	Halo Pad	2										
	96	SweepPad	2										
Synth Effects	97	Rain	2										
	98	SoundTrk	2										
	99	Crystal	2										
	100	Atmosphr	2										
	101	Bright	2										
	102	Goblins	2										
	103	Echoes	2										
	104	Sci-Fi	2										
Ethnic	105	Sitar	1										
	106	Banjo	1										
	107	Shamisen	1										
	108	Koto	1										
	109	Kalimba	1										
	110	Bagpipe	2										
	111	Fiddle	1										
	112	Shanai	1										
Percussive	113	TnklBell	2										
	114	Agogo	2										
	115	SteelDrm	2										
	116	Woodblok	1										
	117	TaikoDrm	1										
	118	MelodTom	2										
	119	Syn Drum	1										
	120	RevCymbl	1										
Sound Effects	121	FretNoiz	2										
	122	BrthNoiz	2										
	123	Seashore	2										
	124	Tweet	2										
	125	Telphone	1										
	126	Helicptr	1										
	127	Applause	1										
	128	Gunshot	1										

(shaded cell) Same as Bank 0

E: Number of elements
†† : MU128 Extension

Bank 34	E	Bank 35	E	Bank 40	E	Bank 41	E	Bank 126	E	Bank 127	E
⬇ Continued on page 95 ⬇											
								Silence		a.bass 1	1
								Silence		a.bass 2	1
								Silence		e.bass 1	1
								Silence		e.bass 2	1
								Silence		slapbas1	1
								Silence		slapbas2	1
								Silence		fretles1	1
								Silence		fretles2	1
								Silence		flute1	1
								Silence		flute2	1
								Silence		piccolo1	1
								Silence		piccolo2	2
								Silence		recorder	1
								Silence		panpipes	2
								Silence		sax1	2
								Silence		sax2	1
								Silence		sax3	1
†† Saw Unis	2	†† OctSawLd	2	†† Seq Saq1	2	†† Seq Saw2	1	Silence		sax4	1
								Silence		clarint1	1
								Silence		clarint2	1
								Silence		oboe	1
								Silence		eng.horn	1
								Silence		bassoon	1
								Silence		harmnica	1
								Silence		trumpet1	1
								Silence		trumpet2	1
								Silence		trmbone1	2
								Silence		trmbone2	2
								Silence		fr.horn1	1
								Silence		fr.horn2	2
								Silence		tuba	2
								Silence		brssect1	1
								Silence		brssect2	2
								Silence		vibe1	1
								Silence		vibe2	1
								Silence		symallet	1
								Silence		maletwin	2
								Silence		glocken	2
								Silence		tubulbel	1
								Silence		xylophon	1
								Silence		marimba	2
								Silence		koto	1
								Silence		sho	2
								Silence		shakhchi	2
								Silence		whistle1	2
								Silence		whistle2	1
								Silence		bottle	2
								Silence		breath	2
								Silence		timpani	1
								Silence		melotom	1
								Silence		deepsnar	1
								Silence		e.perc1	1
								Silence		e.perc2	1
								Silence		taiko	1
								Silence		taikorim	1
								Silence		cymbal	2
								Silence		castanet	1
								Silence		triangle	1
								Silence		orchehit	1
								Silence		telphone	1
								Silence		bird	1
								Silence		jam	1
								Silence		efctwatr	2
								Silence		efctjngl	2

About the 128 GM sounds

Group	Pgm# (1-128)	Instrument name	Display	Explanation of voice
Piano	1	Grand Piano	GrandPno	Grand piano
	2	Bright Piano	BritePno	Bright and crisp grand piano
	3	Electric Grand Piano	El.Grand	Electric grand piano (CP80)
	4	Honky-tonk Piano	HnkyTonk	Ragtime-style piano
	5	Electric Piano 1	E.Piano1	Electric piano
	6	Electric Piano 2	E.Piano2	Electric piano with metallic resonance (DX)
	7	Harpsichord	Harpsi.	Harpsichord
	8	Clavi	Clavi	Clavi
Chromatic Percussion	9	Celesta	Celesta	Celesta
	10	Glockenspiel	Glocken	Glockenspiel
	11	Music Box	MusicBox	Music box
	12	Vibraphone	Vibes	Vibraphone (metal bars with resonator tubes)
	13	Marimba	Marimba	Marimba (wooden bars with resonator tubes)
	14	Xylophone	Xylophon	Xylophone (wooden bars)
	15	Tubular Bells	TubulBel	Tubular bells
	16	Dulcimer	Dulcimer	Dulcimer (struck string instrument)
Organ	17	Drawbar Organ	DrawOrgn	Drawbar organ
	18	Percussive Organ	PercOrgn	Electronic organ with strong attack
	19	Rock Organ	RockOrgn	Rock-style organ
	20	Church Organ	ChrchOrg	Pipe organ
	21	Reed Organ	ReedOrgn	Bright and light organ
	22	Accordion	Acordion	Accordion
	23	Hamonica	Harmnica	Harmonica
	24	Tango Accordion	TangoAcd	Tango accordion
Guitar	25	Nylon Guitar	NylonGtr	Classical guitar
	26	Steel Guitar	SteelGtr	Fork guitar
	27	Jazz Guitar	Jazz Gtr	Electric guitar (jazz)
	28	Clean Guitar	CleanGtr	Electric guitar
	29	Muted Guitar	Mute Gtr	Muted guitar
	30	Overdriven Guitar	Ovrdrive	Overdriven guitar
	31	Distortion Guitar	Dist.Gtr	Distorted guitar
	32	Guitar Harmonics	GtrHarmo	Harmonics
Bass	33	Acoustic Bass	Aco.Bass	Upright bass
	34	Finger Bass	FngrBass	Electric bass (finger plucked)
	35	Pick Bass	PickBass	Electric bass (played with a pick)
	36	Fretless Bass	Fretless	Fretless bass
	37	Slap Bass 1	SlapBas1	Slapped bass
	38	Slap Bass 2	SlapBas2	Slapped bass with soft attack
	39	Synth Bass 1	SynBass1	Synth bass with "sweep"
	40	Synth Bass 2	SynBass2	Synth bass
Strings	41	Violin	Violin	Violin
	42	Viola	Viola	Viola
	43	Cello	Cello	Cello
	44	Contrabass	Contrabs	Contrabass
	45	Tremolo Strings	Trem.Str	Strings played with tremolo
	46	Pizzicato Strings	Pizz.Str	Strings played pizzicato
	47	Orchestral Harp	Harp	Harp
	48	Timpani	Timpani	Timpani
Ensemble	49	Strings 1	Strings1	Strings
	50	Strings 2	Strings2	Strings with gentle attack
	51	Synth Strings 1	Syn Str1	Synth strings
	52	Synth Strings 2	Syn Str2	Synth strings with gentle attack
	53	Choir Aahs	ChoirAah	Choir singing "aah"
	54	Voice Oohs	VoiceOoh	Choir singing "ooh"
	55	Synth Voice	SynVoice	Vocoder-type chorus
	56	Orchestra Hit	Orch.Hit	Orchestra hit
Brass	57	Trumpet	Trumpet	Trumpet
	58	Trombone	Trombone	Trombone
	59	Tuba	Tuba	Tube
	60	Muted Trumpet	Mute Trp	Muted trumpet
	61	French Horn	Fr. Horn	French horn
	62	Brass Section	BrssSect	Brass section
	63	Synth Brass 1	SynBrss1	Synth brass
	64	Synth Brass 2	SynBrss2	Synth brass with gentle attack

Group	Pgm# (1-128)	Instrument name	Display	Explanation of voice
Reed	65	Soprano Sax	SprnoSax	Soprano sax
	66	Alto Sax	Alto Sax	Alto sax
	67	Tenor Sax	TenorSax	Tenor sax
	68	Baritone Sax	Bari.Sax	Baritone sax
	69	Oboe	Oboe	Oboe
	70	English Horn	Eng.Horn	English horn
	71	Bassoon	Bassoon	Bassoon
	72	Clarinet	Clarinet	Clarinet
Pipe	73	Piccolo	Piccolo	Piccolo
	74	Flute	Flute	Flute
	75	Recorder	Recorder	Recorder
	76	Pan Flute	PanFlute	Pan flute
	77	Blown Bottle	Bottle	Blown bootle
	78	Shakuhachi	Shakhchi	Shakuhachi
	79	Whistle	Whistle	Whistle
	80	Ocarina	Ocarina	Ocarina
Synth Lead	81	Square Lead	SquareLd	Analog synth lead (square wave)
	82	Sawtooth Lead	Saw Ld	Analog synth lead (sawtooth wave)
	83	Calliope Lead	CaliopLd	Pan flute-type lead
	84	Chiff Lead	Chiff Ld	Synth brass-type lead
	85	Charang Lead	CharanLd	Distortion guitar-type lead
	86	Voice Lead	Voice Ld	Chorus lead
	87	Fifths Lead	Fifth Ld	Synth lead + perfect 4th below
	88	Bass & Lead	Bass&Ld	Synth bass + synth lead
Synth Pad	89	New Age Pad	NewAgePd	Bell + chorus
	90	Warm Pad	Warm Pad	Pad with gentle attack
	91	Poly Synth Pad	PolySyPd	Synth brass-style pad
	92	Choir Pad	ChoirPad	Chorus pad
	93	Bowed Pad	BowedPad	Glass harp-style pad
	94	Metallic Pad	MetalPad	Pad with hard synth strings
	95	Halo Pad	Halo Pad	Pad with breath noise
	96	Sweep Pad	SweepPad	Sweep pad with gentle attack
Synth Effects	97	Rain	Rain	Warm and transparent synth sound
	98	Sound Track	SoundTrk	Analog synth pad + perfect 4th above
	99	Crystal	Crystal	Music box, bell
	100	Atmosphere	Atmosphr	Harp + strings
	101	Brightness	Bright	Synth chorus with strong attack and rapid decay
	102	Goblins	Goblins	Sweep sound with gentle attack + murmuring
	103	Echoes	Echoes	Pad with definite attack + release echo
	104	Sci-Fi	Sci-Fi	Metallic synth pad
Ethnic	105	Sitar	Sitar	Sitar
	106	Banjo	Banjo	Banjo
	107	Shamisen	Shamisen	Shamisen
	108	Koto	Koto	Koto
	109	Kalimba	Kalimba	Kalimba
	110	Bagpipe	Bagpipe	Bagpipe
	111	Fiddle	Fiddle	Fiddle (violin)
	112	Shanai	Shanai	Ethnic woodwind
Percussive	113	Tinkle Bell	TnklBell	Bell
	114	Agogo	Agogo	Agogo
	115	Steel Drums	SteelDrm	Steel drums
	116	Woodblock	WoodBlok	Woodblock
	117	Taiko Drum	TaikoDrm	Japanese taiko drum
	118	Melodic Tom	MelodTom	Melodic tom
	119	Synth Drum	Syn Drum	Synth drum
	120	Reverse Cymbal	RevCymbl	Reversed cymbal
Sound Effects	121	Fret Noise	FretNoiz	Fret noise
	122	Breath Noise	BrthNoiz	Breath noise
	123	Seashore	Seashore	Waves
	124	Bird Tweet	Tweet	Birds chirping
	125	Telephone Ring	Telphone	Telephone ringing
	126	Helicopter	Helicptr	Helicopter
	127	Applause	Applause	Audience applauding
	128	Gunshot	Gunshot	Gunshot

XG Drum Map

Bank Select MSB				127		127		127		127		127		127		127		127		127	
Bank Select LSB				0		0		0		0		0		0		0		0		0	
Program#				1		1		2		3		4		5		6		7		8	
Note#	Note	Key Off	Alternate Group	Standard Kit Mu Basic	E	Standard Kit MU100 Native****	E	Standard Kit 2	E	Dry Kit ***	E	Bright Kit ***	E	Skim Kit ****	E	Slim Kit ****	E	Rogue Kit ****	E	Hob Kit ****	E
13	C# -1		3	Surdo Mute	1					Surdo Mute V ***	1	Surdo Mute B ***	1	Surdo Mute V ***	1	Surdo Mute V ***	1	Surdo Mute V ***	1	Surdo Mute V ***	1
14	D -1		3	Surdo Open	1					Surdo Open V ***	1	Surdo Open B ***	1	Surdo Open V ***	1	Surdo Open V ***	1	Surdo Open V ***	1	Surdo Open V ***	1
15	D# -1			Hi Q	1							Hi Q B ***	1								
16	E -1			Whip Slap	1							Whip Slap B ***	1								
17	F -1		4	Scratch H	1							Scratch H B ***	1								
18	F# -1		4	Scratch L	1							Scratch L B ***	1								
19	G -1			Finger Snap	1							Finger Snap B ***	1								
20	G# -1			Click Noise	1							Click Noise B ***	1								
21	A -1			Metronome Click	1							Metronome Click B ***	1								
22	A# -1			Metronome Bell	1							Metronome Bell B ***	1								
23	B -1			Seq Click L	1							Seq Click L B ***	1								
24	C 0			Seq Click H	1							Seq Click H B ***	1								
25	C# 0			Brush Tap	1					Brush Tap V ***	1	Brush Tap B ***	1	Brush Tap V ***	1	Brush Tap V ***	1	Brush Tap V ***	1	Brush Tap V ***	1
26	D 0	O		Brush Swirl	1					Brush Swirl V ***	1	Brush Swirl B ***	1	Brush Swirl V ***	1	Brush Swirl V ***	1	Brush Swirl V ***	1	Brush Swirl V ***	1
27	D# 0			Brush Slap	1					Brush Slap V ***	1	Brush Slap B ***	1	Brush Slap V ***	1	Brush Slap V ***	1	Brush Slap V ***	1	Brush Slap V ***	1
28	E 0	O		Brush Tap Swirl	1					Brush Tap Swirl V ***	1	Brush Tap Swirl B ***	1	Brush Tap Swirl L ****	1	Brush Tap Swirl L ****	1	Brush Tap Swirl L ***	1	Brush Tap Swirl L ***	1
29	F 0	O		Snare Roll	1			Snare Roll 2	1	Snare Roll V ***	1	Snare Roll B ***	1	Snare Roll V ***	1	Snare Roll V ***	1	Snare Roll V ***	1	Snare Roll V ***	1
30	F# 0			Castanet	1	Castanet#****	1					Castanet B ***	1	Castanet Sk ****	1	Castanet H ****	1	Castanet H ****	1	Castanet H ****	1
31	G 0			Snare Soft	1	Snare Soft#****	1	Snare Soft 2	1	Snare Dry Soft ***	1	Snare Soft B ***	1	Snare Dry Q ****	1	Snare Rough Q ****	1	Snare Brass Soft ****	1	Snare Brass Soft H ****	1
32	G# 0			Sticks	1							Sticks B ***	1			Sticks Q ****	1				
33	A 0			Kick Soft	1					Kick Dry Soft ***	1	Kick Soft B ***	1	Kick Dry Soft HPF ****	1	Kick Soft Dark ****	1	Kick Soft 2 ****	1	Kick Soft 2 H ****	1
34	A# 0			Open Rim Shot	1	Open Rim Shot#****	1	Open Rim Shot H Short	1	Open Rim Shot Dry V ***	1	Open Rim Shot B ***	1	Open Rim Shot Dry HPF ****	1	Open Rim Shot Sl ****	1	Open Rim Shot 2 ****	1	Open Rim Shot H Short 2 ****	1
35	B 0			Kick Tight	1			Kick Tight Short	1	Kick Dry Tight ***	1	Kick Tight B ***	1	Kick Dry Tight Q****	1	Kick Tight Short L ****	1	Kick Dark 2 ****	1	Kick Dark 2 H ****	1
36	C 1			Kick	1			Kick Short	1	Kick Dry Mute ***	1	Kick B ***	1	Kick Dry Mute HPF ****	1	Kick Short Dark ****	1	Kick Tight 4 ****	1	Kick Tight 4 H ****	1
37	C# 1			Side Stick	1	Side Stick#****	1			Side Stick Dry ***	1	Side Stick B ***	1	Side Stick Dry Q ****	1	Side Stick Q ****	1	Side Stick Tight ****	1	Side Stick Tight H ****	1
38	D 1			Snare	1	Snare#****	1	Snare Short	1	Snare Dry ***	1	Snare B ***	1	Snare Dry H ****	1	Snare Short HPF ****	1	Snare Snappy Short ****	1	Snare Snappy Short H ****	1
39	D# 1			Hand Clap	1							Hand Clap B ***	1	Hand Clap Sk ****	1	Hand Clap Dark ****	1				
40	E 1			Snare Tight	1	Snare Tight#****	1	Snare Tight H	1	Snare Dry Mute ***	1	Snare Tight B ***	1	Snare Dry Mute Q ****	1	Snare Tight Mute ****	1	Snare Brass Hard ****	1	Snare Brass Hard H ****	1
41	F 1			Floor Tom L	1					Floor Tom L Short ***	1	Floor Tom L B ***	1	Floor Tom L Short Sk ****	1	Floor Tom L Tight ****	1	Floor Tom L Tight ****	1	Floor Tom L Tight H ****	1
42	F# 1		1	Hi-Hat Closed	1	Hi-Hat Closed#****	1					Hi-Hat Closed L B ***	1	Hi-Hat Closed H ****	1	Hi-Hat Closed L Q ****	1	Hi-Hat Closed 3 ****	1	Hi-Hat Closed 3 H ****	1
43	G 1			Floor Tom H	1					Floor Tom H Short ***	1	Floor Tom H B ***	1	Floor Tom H Short Sk ****	1	Floor Tom H Tight ****	1	Floor Tom H Tight ****	1	Floor Tom H Tight H ****	1
44	G# 1		1	Hi-Hat Pedal	1	Hi-Hat Pedal#****	1					Hi-Hat Pedal B ***	1	Hi-Hat Pedal H ****	1	Hi-Hat Pedal Q ****	1	Hi-Hat Pedal 3 ****	1	Hi-Hat Pedal 3 H ****	1
45	A 1			Low Tom	1					Low Tom Short ***	1	Low Tom B ***	1	Low Tom Short Sk ****	1	Low Tom Tight ****	1	Low Tom Tight ****	1	Low Tom Tight H ****	1
46	A# 1		1	Hi-Hat Open	1	Hi-Hat Open#****	1					Hi-Hat Open B ***	1	Hi-Hat Open H ****	1	Hi-Hat Open Q ****	1	Hi-Hat Open 3 ****	1	Hi-Hat Open 3 H ****	1
47	B 1			Mid Tom L	1					Mid Tom L Short ***	1	Mid Tom L B ***	1	Mid Tom L Short Sk ****	1	Mid Tom L Tight ****	1	Mid Tom L Tight ****	1	Mid Tom L Tight H ****	1
48	C 2			Mid Tom H	1					Mid Tom H Short ***	1	Mid Tom H B ***	1	Mid Tom H Short Sk ****	1	Mid Tom H Tight ****	1	Mid Tom H Tight ****	1	Mid Tom H Tight H ****	1
49	C# 2			Crash Cymbal 1	1	Crash Cymbal 1#****	1			Crash Cymbal 1 V ***	1	Crash Cymbal 1 B ***	1	Crash Cymbal 1 Q ****	1	Crash Cymbal 1 L ****	1	Crash Cymbal 3 ****	1	Crash Cymbal 3 H ****	1
50	D 2			High Tom	1					High Tom Short ***	1	High Tom B ***	1	High Tom Short Sk ****	1	High Tom Tight ****	1	High Tom Tight ****	1	High Tom Tight H ****	1
51	D# 2			Ride Cymbal 1	1	Ride Cymbal 1#****	1			Ride Cymbal 1 V ***	1	Ride Cymbal 1 B ***	1	Ride Cymbal 1 Sk ****	1	Ride Cymbal 1 L ****	1	Ride Cymbal 3 ****	1	Ride Cymbal 3 H ****	1
52	E 2			Chinese Cymbal	1	Chinese Cymbal#****	1			Chinese Cymbal V ***	1	Chinese Cymbal B ***	1	Chinese Cymbal HPF ****	1	Chinese Cymbal L ****	1	Chinese Cymbal 2 ****	1	Chinese Cymbal 2 H ****	1
53	F 2			Ride Cymbal Cup	1	Ride Cymbal Cup#****	1					Ride Cymbal Cup Short ***	1	Ride Cup Q ****	1	Ride Cymbal Cup L ****	1	Ride Cymbal Cup 2 ****	1	Ride Cymbal Cup 2 H ****	1
54	F# 2			Tambourine	1							Tambourine B ***	1	Tambourine Q ****	1					Tambourine H ****	1
55	G 2			Splash Cymbal	1					Splash Cymbal V ***	1	Splash Cymbal B ***	1	Splash Cymbal H ****	1	Splash Cymbal L Short ****	1	Splash Cymbal V ***	1	Splash Cymbal H ****	1
56	G# 2			Cowbell	1	Cowbell#****	1					Cowbell L ***	1	Cowbell HPF ****	1	Cowbell Dark ****	1	Cowbell Mid ****	1	Cowbell H ****	1
57	A 2			Crash Cymbal 2	1	Crash Cymbal 2#****	1			Crash Cymbal 2 V ***	1	Crash Cymbal 2 B ***	1	Crash Cymbal 2 Dark ****	1	Crash Cymbal 2 L ****	1	Crash Cymbal 4 ****	1	Crash Cymbal 4 H ****	1
58	A# 2			Vibraslap	1							Vibraslap B ***	1								
59	B 2			Ride Cymbal 2	1	Ride Cymbal 2#****	1			Ride Cymbal 2 V ***	1	Ride Cymbal 2 B ***	1	Ride Cymbal 2 Q ****	1	Ride Cymbal 2 L****	1	Ride Cymbal 4 Q ****	1	Ride Cymbal 4 ****	1
60	C 3			Bongo H	1					Bongo H V ***	1	Bongo H B ***	1	Bongo H HPF ****	1	Bongo H V ***	1	Bongo H V ***	1	Bongo H V ***	1
61	C# 3			Bongo L	1					Bongo L V ***	1	Bongo L B ***	1	Bongo L HPF ****	1	Bongo L V ***	1	Bongo L V ***	1	Bongo L V ***	1
62	D 3			Conga H Mute	1	Conga H Mute#****	1			Conga H Mute V ***	1	Conga H Mute B ***	1	Conga H Mute HPF ****	1	Conga H Mute V ***	1	Conga H Mute 2 ****	1	Conga H Mute 2 H ****	1
63	D# 3			Conga H Open	1	Conga H Open#****	1			Conga H Open V ***	1	Conga H Open B ***	1	Conga H Open HPF ****	1	Conga H Open V ***	1	Conga H Open 2 ****	1	Conga H Open 2 H ****	1
64	E 3			Conga L	1	Conga L#****	1			Conga L V ***	1	Conga L B ***	1	Conga L HPF ****	1	Conga L H ****	1	Conga L 2 ****	1	Conga L 2 H ****	1
65	F 3			Timbale H	1					Timbale H V ***	1	Timbale H B ***	1	Timbale H HPF ****	1	Timbale H V ***	1	Timbale H V ***	1	Timbale H V ***	1
66	F# 3			Timbale L	1					Timbale L V ***	1	Timbale L B ***	1	Timbale L HPF ****	1	Timbale L V ***	1	Timbale L V ***	1	Timbale L V ***	1
67	G 3			Agogo H	1					Agogo H V ***	1	Agogo H B ***	1	Agogo H HPF ****	1	Agogo H V ***	1	Agogo H V ***	1	Agogo H V ***	1
68	G# 3			Agogo L	1					Agogo L V ***	1	Agogo L B ***	1	Agogo L HPF ****	1	Agogo L V ***	1	Agogo L V ***	1	Agogo L V ***	1
69	A 3			Cabasa	1							Cabasa B ***	1	Cabasa BPF ****	1						
70	A# 3			Maracas	1							Maracas B ***	1	Maracas L ****	1	Maracas Q ****	1	Maracas Q ****	1	Maracas Q ****	1
71	B 3	O		Samba Whistle H	1					Samba Whistle H V ***	1	Samba Whistle H B ***	1	Samba Whistle H BPF ****	1	Samba Whistle H V ***	1	Samba Whistle H V ***	1	Samba Whistle H V ***	1
72	C 4	O		Samba Whistle L	1					Samba Whistle L V ***	1	Samba Whistle L B ***	1	Samba Whistle L BPF ****	1	Samba Whistle L V ***	1	Samba Whistle L V ***	1	Samba Whistle L V ***	1
73	C# 4			Guiro Short	1							Guiro Short B ***	1								
74	D 4	O		Guiro Long	1							Guiro Long B ***	1								
75	D# 4			Claves	1							Claves B ***	1								
76	E 4			Wood Block H	1							Wood Block H B ***	1								
77	F 4			Wood Block L	1							Wood Block L B ***	1								
78	F# 4			Cuica Mute	1					Cuica Mute V ***	1	Cuica Mute B ***	1								
79	G 4			Cuica Open	1					Cuica Open V ***	1	Cuica Open B ***	1	Cuica Open H ****	1	Cuica Open H ****	1	Cuica Open H ****	1	Cuica Open H ****	1
80	G# 4		2	Triangle Mute	1							Triangle Mute B ***	1								
81	A 4		2	Triangle Open	1							Triangle Open B ***	1								
82	A# 4			Shaker	1							Shaker B ***	1								
83	B 4			Jingle Bells	1							Jingle Bells B ***	1								
84	C 5			Bell Tree	1							Bell Tree B ***	1								
85	C# 5																				
86	D 5																				
87	D# 5																				
88	E 5																				
89	F 5																				
90	F# 5																				
91	G 5																				

: Same as Standard Kit
: No sound

** : MU80 Extension
*** : MU90 Extension
****: MU100 Extension
†† : MU128 Extension

E: Number of elements

Bank Select MSB				127		127		127		127		127		127		127		127		127	
Bank Select LSB				0		0		0		0		0		0		0		0		0	
Program#				9		10		17		18		25		26		27		28		29	
Note#	Note	Key Off	Alternate Group	Room Kit	E	Dark Room Kit ***	E	Rock Kit	E	Rock Kit 2 ***	E	Electro Kit	E	Analog Kit	E	Analog Kit 2 ***	E	Dance Kit ***	E	Hip Hop Kit ***	E
13	C# -1		3			Surdo Mute V ***	1			Surdo Mute V ***	1					Surdo Mute V ***	1			Surdo Mute V ***	1
14	D -1		3			Surdo Open V ***	1			Surdo Open V ***	1					Surdo Open V ***	1			Surdo Open V ***	1
15	D# -1																				
16	E -1																				
17	F -1		4																		
18	F# -1		4																		
19	G -1																				
20	G# -1																				
21	A -1																				
22	A# -1																				
23	B -1																				
24	C 0																				
25	C# 0					Brush Tap V ***	1			Brush Tap V ***	1					Brush Tap V ***	1			Brush Tap V ***	1
26	D 0	O				Brush Swirl V ***	1			Brush Swirl V ***	1					Brush Swirl V ***	1			Brush Swirl V ***	1
27	D# 0					Brush Slap V ***	1			Brush Slap V ***	1					Brush Slap V ***	1			Brush Slap V ***	1
28	E 0	O				Brush Tap Swirl V ***	1			Brush Tap Swirl V ***	1	Reverse Cymbal	1	Reverse Cymbal	1	Reverse Cymbal ***	1	Reverse Cymbal ***	1	Brush Tap Swirl V ***	1
29	F 0	O				Snare Roll V ***	1			Snare Roll V ***	1					Snare Roll V ***	1			Snare Roll V ***	1
30	F# 0											Hi Q 2	1	Hi Q 2	1	Hi Q 2 ***	1	Hi Q 2 ***	1		
31	G 0							Snare Noisy	1	Snare Noisy 5 ***	1	Snare Snappy Electro	1	Snare Noisy 4	1	Snare Analog 3 ***	1	Snare Techno 3 ***	1	Open Rim Shot 2 Soft ***	1
32	G# 0																				
33	A 0							Kick Tight 2	1	Kick Tight 3 ***	1	Kick 3	1	Kick Tight 2	1	Kick Techno Soft ***	1	Kick Techno Q ***	1	Kick Dry Soft 2 ***	1
34	A# 0															Open Rim Shot Dry V ***	1	Rim Gate ***	1	Open Rim Shot 2 ***	1
35	B 0					Kick Dark ***	1	Kick 2	1	Kick 4 ***	1	Kick Gate	1	Kick Analog Short	1	Kick Techno Tight ***	1	Kick Techno L ***	1	Kick Dim ***	1
36	C 1			Kick Room **	1	Kick Room Gate ***	1	Kick Gate	1	Kick Gate 2 ***	1	Kick Gate Heavy	1	Kick Analog	1	Kick Techno ***	1	Kick Techno 2 ***	1	Kick Boon ***	1
37	C# 1													Side Stick Analog	1	Side Stick Analog ***	1	Side Stick Analog ***	1	Side Stick Dry ***	1
38	D 1			Snare Snappy	1	Snare Snappy 2 ***	1	Snare Rock	1	Snare Rock 2 ***	1	Snare Noisy 2	1	Snare Analog	1	Snare Techno ***	1	Snare Clap ***	2	Snare Dry Mute ***	1
39	D# 1																				
40	E 1			Snare Tight Snappy	1	Snare Tight Snappy 2 ***	1	Snare Rock Rim	1	Snare Rock Rim Q ***	1	Snare Noisy 3	1	Snare Analog 2	1	Snare Techno 2 ***	1	Snare Dry 2 ***	1	Snare White ***	1
41	F 1			Tom Room 1	1	Tom Room 1 Q ***	1	Tom Rock 1	1	Tom Rock 1 H ***	1	Tom Electro 1	1	Tom Analog 1	1	Tom Analog 1 ***	1	Tom Analog 1 ***	1	Floor Tom L Short ***	1
42	F# 1		1			Hi-Hat Closed Q ***	1			Hi-Hat Closed 2 ***	1			Hi-Hat Closed Analog	1	Hi-Hat Closed Analog ***	1	Hi-Hat Closed 3 ***	1	Hi-Hat Closed 2 H ***	1
43	G 1			Tom Room 2	1	Room Tom 2 Q ***	1	Tom Rock 2	1	Tom Rock 2 H ***	1	Tom Electro 2	1	Tom Analog 2	1	Tom Analog 2 ***	1	Tom Analog 2 ***	1	Floor Tom H Short ***	1
44	G# 1		1			Hi-Hat Pedal Q ***	1			Hi-Hat Pedal 2 ***	1			Hi-Hat Closed Analog 2	1	Hi-Hat Closed Analog 2 ***	1	Hi-Hat Closed Analog 2 ***	1	Hi-Hat Pedal 2 H ***	1
45	A 1			Tom Room 3	1	Room Tom 3 Q ***	1	Tom Rock 3	1	Tom Rock 3 L Short ***	1	Tom Electro 3	1	Tom Analog 3	1	Tom Analog 3 ***	1	Tom Analog 3 ***	1	Low Tom Short ***	1
46	A# 1		1			Hi-Hat Open L ***	1			Hi-Hat Open 2 ***	1			Hi-Hat Open Analog	1	Hi-Hat Open Analog ***	1	Hi-Hat Open 3 ***	1	Hi-Hat Open 2 L ***	1
47	B 1			Tom Room 4	1	Tom Room 4 Dark ***	1	Tom Rock 4	1	Tom Rock 4 L Short ***	1	Tom Electro 4	1	Tom Analog 4	1	Tom Analog 4 ***	1	Tom Analog 4 ***	1	Mid Tom L Short ***	1
48	C 2			Tom Room 5	1	Tom Room 5 L Dark ***	1	Tom Rock 5	1	Tom Rock 5 L Short ***	1	Tom Electro 5	1	Tom Analog 5	1	Tom Analog 5 ***	1	Tom Analog 5 ***	1	Mid Tom H Short ***	1
49	C# 2													Crash Analog	1	Crash Analog ***	1	Crash Analog ***	1	Crash Cymbal 1 V ***	1
50	D 2			Tom Room 6	1	Tom Room 6 L Dark ***	1	Tom Rock 6	1	Tom Rock 6 L Short ***	1	Tom Electro 6	1	Tom Analog 6	1	Tom Analog 6 ***	1	Tom Analog 6 ***	1	High Tom Short ***	1
51	D# 2					Ride Cymbal 1 V ***	1			Ride Cymbal 1 V ***	1					Ride Cymbal 1 V ***	1			Ride Cymbal 1 V ***	1
52	E 2					Chinese Cymbal V ***	1			Chinese Cymbal V ***	1					Chinese Cymbal V ***	1			Chinese Cymbal V ***	1
53	F 2																				
54	F# 2																				
55	G 2					Splash Cymbal V ***	1			Splash Cymbal V ***	1					Splash Cymbal V ***	1			Splash Cymbal V ***	1
56	G# 2													Cowbell Analog	1	Cowbell Analog ***	1	Cowbell Analog ***	1		
57	A 2					Crash Cymbal 2 V ***	1			Crash Cymbal 2 V ***	1					Crash Cymbal 2 V ***	1			Crash Cymbal 2 V ***	1
58	A# 2																				
59	B 2					Ride Cymbal 2 V ***	1			Ride Cymbal 2 V ***	1					Ride Cymbal 2 V ***	1			Ride Cymbal 2 V ***	1
60	C 3					Bongo H V ***	1			Bongo H V ***	1					Bongo H V ***	1			Bongo H V ***	1
61	C# 3					Bongo L V ***	1			Bongo L V ***	1					Bongo L V ***	1			Bongo L V ***	1
62	D 3					Conga H Mute V ***	1			Conga H Mute V ***	1			Conga Analog H	1	Conga Analog H ***	1	Conga Analog H ***	1	Conga H Mute V ***	1
63	D# 3					Conga H Open V ***	1			Conga H Open V ***	1			Conga Analog M	1	Conga Analog M ***	1	Conga Analog M ***	1	Conga H Open V ***	1
64	E 3					Conga L V ***	1			Conga L V ***	1			Conga Analog L	1	Conga Analog L ***	1	Conga Analog L ***	1	Conga L V ***	1
65	F 3					Timbale H V ***	1			Timbale H V ***	1					Timbale H V ***	1			Timbale H V ***	1
66	F# 3					Timbale L V ***	1			Timbale L V ***	1					Timbale L V ***	1			Timbale L V ***	1
67	G 3					Agogo H V ***	1			Agogo H V ***	1					Agogo H V ***	1			Agogo H V ***	1
68	G# 3					Agogo L V ***	1			Agogo L V ***	1					Agogo L V ***	1			Agogo L V ***	1
69	A 3																				
70	A# 3													Maracas 2	1	Maracas 2 ***	1	Maracas 2 ***	1		
71	B 3	O				Samba Whistle H V ***	1			Samba Whistle H V ***	1					Samba Whistle H V ***	1			Samba Whistle H V ***	1
72	C 4	O				Samba Whistle L V ***	1			Samba Whistle L V ***	1					Samba Whistle L V ***	1			Samba Whistle L V ***	1
73	C# 4																				
74	D 4	O																			
75	D# 4													Claves 2	1	Claves 2 ***	1	Claves 2 ***	1		
76	E 4																				
77	F 4																				
78	F# 4					Cuica Mute V ***	1			Cuica Mute V ***	1	Scratch H 2	1	Scratch H 2	1	Scratch H 2 ***	1	Scratch H 2 ***	1	Cuica Mute V ***	1
79	G 4					Cuica Open V ***	1			Cuica Open V ***	1	Scratch L 2	1	Scratch L 3	1	Scratch L 3 ***	1	Scratch L 3 ***	1	Cuica Open V ***	1
80	G# 4		2																		
81	A 4		2																		
82	A# 4																				
83	B 4																				
84	C 5																				
85	C# 5																				
86	D 5																				
87	D# 5																				
88	E 5																				
89	F 5																				
90	F# 5																				
91	G 5																				

XG Drum Map

Bank Select MSB				127		127		127		127		127		127		127		127		127		127	
Bank Select LSB				0		0		0		0		0		0		0		0		0		0	
Program#				1		30		31		32		33		34		41		42		49		65	
Note#	Note	Key Off	Alternate Group	Standard Kit Mu Basic	E	Jungle Kit ***	E	Apogee Kit ****	E	Perigee Kit ****	E	Jazz Kit	E	Jazz Kit 2 ***	E	Brush Kit	E	Brush Kit2 ****	E	Symphony Kit	E	Tramp Kit ****	E
13	C# -1		3	Surdo Mute	1	Surdo Mute V ***	1	Surdo Mute V ***	1	Surdo Mute V ***	1			Surdo Mute V ***	1								
14	D -1		3	Surdo Open	1	Surdo Open V ***	1	Surdo Open V ***	1	Surdo Open V ***	1			Surdo Open V ***	1								
15	D# -1			Hi Q	1																		
16	E -1			Whip Slap	1																		
17	F -1		4	Scratch H	1																		
18	F# -1		4	Scratch L	1																		
19	G -1			Finger Snap	1																		
20	G# -1			Click Noise	1																		
21	A -1			Metronome Click	1																		
22	A# -1			Metronome Bell	1																		
23	B -1			Seq Click L	1																		
24	C 0			Seq Click H	1																		
25	C# 0			Brush Tap	1	Brush Tap V ***	1	Brush Tap V ***	1	Brush Tap V ***	1			Brush Tap V ***	1							Brush Tap V ***	1
26	D 0	O		Brush Swirl	1	Brush Swirl V ***	1	Brush Swirl V ***	1	Brush Swirl V ***	1			Brush Swirl V ***	1							Brush Swirl V ***	1
27	D# 0			Brush Slap	1	Brush Slap V ***	1	Brush Slap V ***	1	Brush Slap V ***	1			Brush Slap V ***	1							Brush Slap V ***	1
28	E 0	O		Brush Tap Swirl	1	Brush Tap Swirl V ***	1	Reverse Cymbal ***	1	Reverse Cymbal ***	1			Brush Tap Swirl V ***	1			Brush Tap Swirl L ****	1			Reverse Cymbal ***	1
29	F 0	O		Snare Roll	1	Snare Roll V ***	1							Snare Roll V ***	1			Snare Roll V ***	1			Snare Roll V ***	1
30	F# 0			Castanet	1			Hi Q 2 ***	1	Hi Q 2 ***	1							Castanet H ****	1			Hi Q 2 ***	1
31	G 0			Snare Soft	1	Rim Gate 2 ***	1	Snare Analog 4 ****	1	Snare Analog 4 H ****	1					Brush Slap 2	1	Snare Dry Hard ****	1			Snare Techno 3 Q ****	1
32	G# 0			Sticks	1																	Sticks Q ****	1
33	A 0			Kick Soft	1	Kick Cough ***	1	Kick Techno 3 ****	1	Kick Techno 3 ****	1							Kick Release ****	1	Kick Soft 2	1	Kick Techno Q 2 ****	1
34	A# 0			Open Rim Shot	1	Rim Gate 3 ***	1	Open Rim Shot L ****	1	Open Rim Shot L ****	1							Open Rim Shot Dry L ****	1			Rim Gate Lo-Fi ****	1
35	B 0			Kick Tight	1	Kick Zap ***	1	Kick Techno 4 ****	1	Kick Techno 4 H ****	1							Kick Cloudy H ****	1	Gran Cassa	1	Kick Techno L Q ****	1
36	C 1			Kick	1	Kick Dawn ***	1	Kick Techno Tight 2 ****	1	Kick Techno Tight 2 H ****	1	Kick Jazz	1	Kick Jazz L ***	1	Kick Small	1	Kick Cloudy L ****	1	Gran Cassa Mute	1	Kick Techno 2 Gate ****	1
37	C# 1			Side Stick	1	Side Stick Dry ***	1	Side Stick Analog 2 ****	1	Side Stick Analog 2 H ****	1							Side Stick B 2 ****	1			Side Stick Analog Q ****	1
38	D 1			Snare	1	Snare Tin ***	1	Snare Analog 5 ****	1	Snare Analog 5 H ****	1			Snare H ***	1	Brush Slap 3	1	Brush Slap 3 Q ****	1	Band Snare	1	Snare Clap ***	2
39	D# 1			Hand Clap	1			Clap Ambience ****	1	Clap Ambience H ****	1											Hand Clap Dark ****	1
40	E 1			Snare Tight	1	Snare Can ***	1	Snare Analog 6 ****	1	Snare Analog 6 H ****	1			Snare Tight L ***	1	Brush Tap 2	1	Brush Snare Loud ****	1	Band Snare 2	1	Snare Dry 2 Gate ****	1
41	F 1			Floor Tom L	1	Floor Tom L Short ***	1	Tom Techno 1 ****	1	Tom Techno 1 H ****	1	Tom Jazz 1	1	Tom Jazz 7 ***	1	Tom Brush 1	1	Tom Brush 7 ****	1	Tom Jazz 1	1	Tom Analog 7 ****	1
42	F# 1		1	Hi-Hat Closed	1	Hi-Hat Closed 2 Soft ***	1	Hi-Hat Closed Analog 3 ****	1	Hi-Hat Closed Analog 3 H ****	1			Hi-Hat Closed L ***	1			Hi-Hat Closed 4 ****	1			Hi-Hat Closed 3 Dark ****	1
43	G 1			Floor Tom H	1	Floor Tom H Short ***	1	Tom Techno 2 ****	1	Tom Techno 2 H ****	1	Tom Jazz 2	1	Tom Jazz 8 ***	1	Tom Brush 2	1	Tom Brush 8 ****	1	Tom Jazz 2	1	Tom Analog 8 ****	1
44	G# 1		1	Hi-Hat Pedal	1	Hi-Hat Pedal 2 Soft ***	1	Hi-Hat Closed Analog 4 ****	1	Hi-Hat Closed Analog 4 H ****	1			Hi-Hat Pedal L ***	1			Hi-Hat Pedal 4 ****	1			Hi-Hat Closed Analog 2 L****	1
45	A 1			Low Tom	1	Low Tom Short ***	1	Tom Techno 3 ****	1	Tom Techno 3 H ****	1	Tom Jazz 3	1	Tom Jazz 9 ***	1	Tom Brush 3	1	Tom Brush 9 ****	1	Tom Jazz 3	1	Tom Analog 9 ****	1
46	A# 1		1	Hi-Hat Open	1	Hi-Hat Open 2 Soft ***	1	Hi-Hat Open Analog 2 ****	1	Hi-Hat Open Analog 2 H ****	1			Hi-Hat Open L ***	1			Hi-Hat Open 4 ****	1			Hi-Hat Open 3 Dark ****	1
47	B 1			Mid Tom L	1	Mid Tom L Short ***	1	Tom Techno 4 ****	1	Tom Techno 4 H ****	1	Tom Jazz 4	1	Tom Jazz 10 ***	1	Tom Brush 4	1	Tom Brush 10 ****	1	Tom Jazz 4	1	Tom Analog 10 ****	1
48	C 2			Mid Tom H	1	Mid Tom H Short ***	1	Tom Techno 5 ****	1	Tom Techno 5 H ****	1	Tom Jazz 5	1	Tom Jazz 11 ***	1	Tom Brush 5	1	Tom Brush 11 ****	1	Tom Jazz 5	1	Tom Analog 11 ****	1
49	C# 2			Crash Cymbal 1	1	Crash Cymbal 1 V ***	1	Crash Analog ***	1	Crash Analog H ****	1							Crash Cymbal 4 ****	1	Hand Cymbal	1	Crash Analog Dark ****	1
50	D 2			High Tom	1	High Tom Short ***	1	Tom Techno 6 ****	1	Tom Techno 6 H ****	1	Tom Jazz 6	1	Tom Jazz 12 ***	1	Tom Brush 6	1	Tom Brush 12 ****	1	Tom Jazz 6	1	Tom Analog 12 ****	1
51	D# 2			Ride Cymbal 1	1	Ride Cymbal 1 V ***	1	Ride Cymbal Analog 1 ****	1	Ride Cymbal Analog 1 H ****	1			Ride Cymbal 1 V ***	1			Ride Cymbal 1 H ****	1	Hand Cymbal Short	1	Ride Cymbal 1 Dark ****	1
52	E 2			Chinese Cymbal	1	Chinese Cymbal V ***	1			Chinese Cymbal H ****	1			Chinese Cymbal V ***	1							Chinese Cymbal L ****	1
53	F 2			Ride Cymbal Cup	1			Ride Cymbal Cup Q ****	1	Ride Cymbal Cup H ****	1			Ride Cymbal Cup L ***	1			Ride Cymbal Cup 6 ****	1			Ride Cymbal Cup Dark ****	1
54	F# 2			Tambourine	1					Tambourine H ****	1											Tambourine Dark ****	1
55	G 2			Splash Cymbal	1	Splash Cymbal V ***	1	Splash Cymbal V ***	1	Splash Cymbal H ****	1			Splash Cymbal V ***	1			Splash Cymbal V ***	1			Splash Cymbal L Q ****	1
56	G# 2			Cowbell	1			Cowbell Analog L ****	1	Cowbell Analog H ****	1							Cowbell 2 ****	1			Cowbell Analog Q ***	1
57	A 2			Crash Cymbal 2	1	Crash Cymbal 2 V ***	1	Crash Cymbal 2 V ***	1	Crash Cymbal 2 H ****	1			Crash Cymbal 2 V ***	1					Hand Cymbal 2	1	Crash Cymbal 2 Q ****	1
58	A# 2			Vibraslap	1																		
59	B 2			Ride Cymbal 2	1	Ride Cymbal 2 V ***	1	Ride Cymbal Analog 2 ****	1	Ride Cymbal Analog 2 H ****	1			Ride Cymbal 2 V ***	1			Ride Cymbal 6 ****	1	Hand Cymbal 2 Short	1	Ride Cymbal 2 D ****	1
60	C 3			Bongo H	1	Bongo H V ***	1	Bongo H V ***	1	Bongo H V ***	1			Bongo H V ***	1							Bongo H V ***	1
61	C# 3			Bongo L	1	Bongo L V ***	1	Bongo L V ***	1	Bongo L V ***	1			Bongo L V ***	1							Bongo L V ***	1
62	D 3			Conga H Mute	1	Conga H Mute V ***	1	Conga Analog H Long ****	1	Conga Analog H Long H ****	1			Conga H Mute V ***	1			Conga H Mute V ***	1			Conga Analog H Long ****	1
63	D# 3			Conga H Open	1	Conga H Open V ***	1	Conga Analog M Long ****	1	Conga Analog M Long H ****	1			Conga H Open V ***	1			Conga H Open V ***	1			Conga Analog M Long ****	1
64	E 3			Conga L	1	Conga L V ***	1	Conga Analog L Long ****	1	Conga Analog L Long H ****	1			Conga L V ***	1			Conga L 2 ****	1			Conga Analog L Long ****	1
65	F 3			Timbale H	1	Timbale H V ***	1	Timbale H V ***	1	Timbale H V ***	1			Timbale H V ***	1							Timbale H V ***	1
66	F# 3			Timbale L	1	Timbale L V ***	1	Timbale L V ***	1	Timbale L V ***	1			Timbale L V ***	1							Timbale L V ***	1
67	G 3			Agogo H	1	Agogo H V ***	1	Agogo H V ***	1	Agogo H V ***	1			Agogo H V ***	1							Agogo H V ***	1
68	G# 3			Agogo L	1	Agogo L V ***	1	Agogo L V ***	1	Agogo L V ***	1			Agogo L V ***	1							Agogo L V ***	1
69	A 3			Cabasa	1																		
70	A# 3			Maracas	1			Maracas 2 ***	1	Maracas 2 ***	1							Maracas Q ****	1			Maracas 2 ***	1
71	B 3	O		Samba Whistle H	1	Samba Whistle H V ***	1	Samba Whistle H V ***	1	Samba Whistle H V ***	1			Samba Whistle H V ***	1							Samba Whistle H V ***	1
72	C 4	O		Samba Whistle L	1	Samba Whistle L V ***	1	Samba Whistle L V ***	1	Samba Whistle L V ***	1			Samba Whistle L V ***	1							Samba Whistle L V ***	1
73	C# 4			Guiro Short	1																		
74	D 4	O		Guiro Long	1																		
75	D# 4			Claves	1			Claves 2 ***	1	Claves 2 ***	1												
76	E 4			Wood Block H	1																		
77	F 4			Wood Block L	1																		
78	F# 4			Cuica Mute	1	Cuica Mute V ***	1	Scratch H 2 ***	1	Scratch H 2 ***	1			Cuica Mute V ***	1							Scratch H 2 ***	1
79	G 4			Cuica Open	1	Cuica Open V ***	1	Scratch L 3 ***	1	Scratch L 3 ***	1			Cuica Open V ***	1			Cuica Open H ****	1			Scratch L 3 ***	1
80	G# 4		2	Triangle Mute	1																		
81	A 4		2	Triangle Open	1																		
82	A# 4			Shaker	1																		
83	B 4			Jingle Bells	1																		
84	C 5			Bell Tree	1																		
85	C# 5																						
86	D 5																						
87	D# 5																						
88	E 5																						
89	F 5																						
90	F# 5																						
91	G 5																						

(light grey): Same as Standard Kit
(dark grey): No sound

** : MU80 Extension
*** : MU90 Extension
****: MU100 Extension
†† : MU128 Extension

E: Number of elements

Bank Select MSB				127		127		127		127	
Bank Select LSB				0		0		0		0	
Program#				66		67		127		128	
Note#	Note	Key Off	Alternate Group	Amber Kit ****	E	Coffin Kit ****	E	Standard Kit MU100 Native****	E	Standard Kit MU Basic	E
13	C# -1		3	Surdo Mute V ***	1	Surdo Mute V ***	1				
14	D -1		3	Surdo Open V ***	1	Surdo Open V ***	1				
15	D# -1										
16	E -1										
17	F -1		4								
18	F# -1		4								
19	G -1										
20	G# -1										
21	A -1										
22	A# -1										
23	B -1										
24	C 0										
25	C# 0			Brush Tap V ***	1	Brush Tap V ***	1				
26	D 0	O		Brush Swirl V ***	1	Brush Swirl V ***	1				
27	D# 0			Brush Slap V ***	1	Brush Slap V ***	1				
28	E 0	O		Brush Tap Swirl L ***	1	Brush Tap Swirl L ***	1				
29	F 0	O		Snare Roll V ***	1	Snare Roll V ***	1				
30	F# 0							Castanet#****	1		
31	G 0			Open Rim Shot 3 Soft ****	1	Rim Gate 4 ****	1	Snare Soft#****	1		
32	G# 0			Sticks Q ****	1	Sticks Q ****	1				
33	A 0			KickDrySoft3 ****	1	Kick Cough L ****	1				
34	A# 0			Open Rim Shot Dry ****	1	Rim Gate 5 ****	1	Open Rim Shot#****	1		
35	B 0			Kick Comp 1 L****	1	Kick Comp 2 L ****	1				
36	C 1			Kick Comp 1 H****	1	Kick Comp 2 H ****	1				
37	C# 1			Side Stick Dry L ****	1	Side Stick Dry L ****	1	Side Stick#****	1		
38	D 1			Snare Dry Mute L ****	1	Snare Tin L ****	1	Snare#****	1		
39	D# 1			Hand Clap Dark ****	1	Hand Clap Dark ****	1				
40	E 1			Hip Snare Long ****	1	Snare Can L ****	1	Snare Tight#****	1		
41	F 1			Floor Tom Tech L ****	1	Floor Tom Tech L ****	1				
42	F# 1		1	Hi-Hat Closed Tech ****	1	Hi-Hat Closed Tech ****	1	Hi-Hat Closed#****	1		
43	G 1			Floor Tom Tech H ****	1	Floor Tom Tech H ****	1				
44	G# 1		1	Hi-Hat Pedal Tech ****	1	Hi-Hat Pedal Tech ****	1	Hi-Hat Pedal#****	1		
45	A 1			Low Tom Tech ****	1	Low Tom Tech ****	1				
46	A# 1		1	Hi-Hat Open 3 Dark ****	1	Hi-Hat Open 3 Dark ****	1	Hi-Hat Open#****	1		
47	B 1			Mid Tom Tech L ****	1	Mid Tom Tech L ****	1				
48	C 2			Mid Tom Tech H ****	1	Mid Tom Tech H ****	1				
49	C# 2			Crash Cymbal Dark ****	1	Crash Cymbal Dark 2 ****	1	Crash Cymbal 1#****	1		
50	D 2			High Tom Tech ****	1	High Tom Tech ****	1				
51	D# 2			Ride Cymbal 1 Dark ****	1	Ride Cymbal Hard 2 ****	1	Ride Cymbal 1#****	1		
52	E 2			Chinese Cymbal H2 ****	1	Chinese Cymbal Q ****	1	Chinese Cymbal#****	1		
53	F 2			Ride Cymbal Cup Dark ****	1	Ride Cymbal Cup 5 ****	1	Ride Cymbal Cup#****	1		
54	F# 2			Tambourine Dark ****	1	Tambourine Dark ****	1				
55	G 2			Splash Cymbal L Q ****	1	Tech Splash Cymbal ****	1				
56	G# 2			Cowbell Lo-Fi ****	1	Cowbell Lo-Fi ****	1	Cowbell#****	1		
57	A 2			Crash Cymbal 2 Q ****	1	Crash Cymbal 2 Q ****	1	Crash Cymbal 2#****	1		
58	A# 2										
59	B 2			Ride Cymbal 2 V ***	1	Ride Cymbal 5 ****	1	Ride Cymbal 2#****	1		
60	C 3			Bongo H V ***	1	Bongo H V ***	1				
61	C# 3			Bongo L V ***	1	Bongo L V ***	1				
62	D 3			Conga H Mute V ***	1	Conga H Mute V ***	1	Conga H Mute#****	1		
63	D# 3			Conga H Open V ***	1	Conga H Open V ***	1	Conga H Open#****	1		
64	E 3			Conga L 2 ****	1	Conga L 2 ****	1	Conga L#****	1		
65	F 3			Timbale H V ***	1	Timbale H V ***	1				
66	F# 3			Timbale L V ***	1	Timbale L V ***	1				
67	G 3			Agogo H V ***	1	Agogo H V ***	1				
68	G# 3			Agogo L V ***	1	Agogo L V ***	1				
69	A 3										
70	A# 3			Maracas Q ****	1	Maracas Q ****	1				
71	B 3	O		Samba Whistle H V ***	1	Samba Whistle H V ***	1				
72	C 4	O		Samba Whistle L V ***	1	Samba Whistle L V ***	1				
73	C# 4										
74	D 4	O									
75	D# 4										
76	E 4										
77	F 4										
78	F# 4										
79	G 4			Cuica Open H ***	1	Cuica Open H ***	1				
80	G# 4		2								
81	A 4		2								
82	A# 4										
83	B 4										
84	C 5										
85	C# 5										
86	D 5										
87	D# 5										
88	E 5										
89	F 5										
90	F# 5										
91	G 5										

Bank Select MSB				126		126		126		126		126		126		126		126	
Bank Select LSB				0		0		0		0		0		0		0		0	
Program#				1		2		17		18		19		33		34		35	
Note#	Note	Key Off	Alternate Group	SFX Kit 1	E	SFX Kit 2	E	Techno Kit K/S ****	E	Techno Kit Hi ****	E	Techno Kit Lo ****	E	Sakura Kit ****	E	Small Latin Kit ****	E	†† China Kit	E
13	C# -1		3																
14	D -1		3																
15	D# -1																		
16	E -1																		
17	F -1		4																
18	F# -1		4																
19	G -1																		
20	G# -1																		
21	A -1																		
22	A# -1																		
23	B -1																		
24	C 0																		
25	C# 0																		
26	D 0	O																	
27	D# 0																		
28	E 0	O		Insects ****	2														
29	F 0	O		Bacteria ****	2														
30	F# 0																		
31	G 0																		
32	G# 0																		
33	A 0																		
34	A# 0																		
35	B 0																		
36	C 1			Cutting Noise	1	Phone Call **	1	Heavy Techno Kick 1 ****	1	Hyper Tom H 1 ****	1	Hyper Tom L 1 ****	1	Dora ****	1	Latin Cymbal Short ****	1	†† Bangu	1
37	C# 1			Cutting Noise 2	2	Door Squeak	1	Heavy Techno Kick 2 ****	1	Asian Tom H ****	1	Asian Tom L ****	1	Tsuzumi Pon ****	1	Claves SL 1 ****	1	†† Dagu Mute	1
38	D 1			Distorted Cutting Noise **	2	Door Slam	1	Psychedelic Kick ****	1	Lo-Fi Tom H ****	1	Lo-Fi Tom L ****	1	Tsuzumi Pu ****	1	Claves SL 2 ****	1	†† Dagu Heavy	1
39	D# 1			String Slap	1	Scratch Cut	1	Gate Tekno Kick ****	1	Hyper Tom H 2 ****	1	Hyper Tom L 2 ****	1	Tsuzumi Ta ****	1	Claves SL 3 ****	1	†† Paigu High	1
40	E 1			Bass Slide **	2	Scratch H 3	2	Rap Kick ****	1	Flanged Tom H ****	1	Flanged Tom L ****	1	Tsuzumi Chon ****	1	Claves SL 4 ****	1	†† Paigu Middle	1
41	F 1			Pick Scrape **	1	Wind Chime	1	Heavy Techno Kick 3 ****	1	Minimal Tom H ****	1	Minimal Tom L ****	1	Tsuzumi Tsu ****	1	Claves SL 5 ****	1	†† Paigu Low	1
42	F# 1		1			Telephone Ring 2	1	Heavy Techno Kick 4 ****	1	Vox Drum H ****	1	Vox Drum L ****	1	Shimetaiko Ten ****	1	Muted Percussion SL 1 ****	1		
43	G 1							Future Kick ****	1	Android Walk 1 H ****	1	Android Walk 1 L ****	1	Shimetaiko Tsu ****	1	Muted Percussion SL 2 ****	1		
44	G# 1		1					Asian Kick ****	1	Android Walk 2 H ****	1	Android Walk 2 L ****	1	Yagura Open ****	1	Muted Percussion SL 3 ****	1		
45	A 1							Imbalance Kick ****	1	Electro Blip H ****	1	Electro Blip L ****	1	Ohdaiko Rim ****	1	Muted Percussion SL 4 ****	1		
46	A# 1		1					Justice Kick ****	1	Wood Percussions H ****	1	Wood Percussions L ****	1	Oriental Tambourine ****	1	Pandiero ****	1		
47	B 1							Minimal Kick ****	1	Wood Door Open H ****	1	Wood Door Open L ****	1	Oriental Drum 1 ****	1	Surdo Mute SL 1 ****	1		
48	C 2									Reso Noise Burst H ****	1	Reso Noise Burst L ****	1	Oriental Drum 2 ****	1	Surdo Mute SL 2 ****	1		
49	C# 2									LFO Metal Attack H ****	1	LFO Metal Attack L ****	1	Oriental Drum 3 ****	1	Surdo Open SL ****	1		
50	D 2									Steel Conga H ****	1	Steel Conga L ****	1	Oriental Rim 1 ****	1	Surdo Rim SL ****	1		
51	D# 2									Rate Down Snare H ****	1	Rate Down Snare L ****	1	Oriental Rim 2 ****	1	Tamborim Mute ****	1		
52	E 2			Flute Key Click	1	Car Engine Ignition	1	Radio Snare ****	1	Pop Ambient H ****	1	Pop Ambient L ****	1	Oriental Rim 3 ****	1	Tamborim Open ****	1	†† Zhongcha Mute	1
53	F 2					Car Tires Squeal	1	Cold Dry Snare 1 ****	1	Tunnel Ambient H ****	1	Tunnel Ambient L ****	1	Oriental Rim 4 ****	1	TimbaleL Drum ****	1	†† Zhongcha Open	1
54	F# 2					Car Passing	1	Slap Snare ****	1	Vibraslap H ****	1	Vibraslap L ****	1	Oriental Metal Rim 1 ****	1	TimbaleH Drum ****	1	†† Zhongluo Mute	1
55	G 2					Car Crash	1	Cold Dry Snare 2 ****	1	Gun Shot Slap H ****	1	Gun Shot Slap L ****	1	Oriental Metal Rim 2 ****	1	TimbaleL Rim ****	1	†† Zhongluo Open	1
56	G# 2					Siren	2	Cold Dry Snare 3 ****	1	Punch Snare H ****	1	Punch Snare L ****	1	Oriental Metal Rim 3 ****	1	TimbaleH Rim ****	1	†† Xiaoluo Open	1
57	A 2					Train	1	Lo-Fi Metal Snare ****	1	Bomb Snare H ****	1	Bomb Snare L ****	1	Oriental Metal Rim 4 ****	1	Timbale Paila 1 ****	1	†† Xizocha Mute	1
58	A# 2					Jet Plane	2			Space Tambourine H ****	1	Space Tambourine L ****	1	Oriental Metal Rim 5 ****	1	Timbale Paila 2 ****	1	†† Xiaocha Open	1
59	B 2					Starship	2			Ambient Cow Bell H ****	1	Ambient Cow Bell L ****	1						
60	C 3					Burst	2			Chink Hat H ****	1	Chink Hat L ****	1						
61	C# 3					Roller Coaster	2			Coal Mine 1 H ****	1	Coal Mine 1 L ****	1						
62	D 3					Submarine	2			Coal Mine 2 H ****	1	Coal Mine 2 L ****	1						
63	D# 3					Connectivity ****	2			Hammer Hit 1 H ****	1	Hammer Hit 1 L ****	1						
64	E 3					Mystery ****	2			Hammer Hit 2 H ****	1	Hammer Hit 2 L ****	1						
65	F 3									Hammer Hit 3 H ****	1	Hammer Hit 3 L ****	1						
66	F# 3									Insensible Hah H ****	1	Insensible Hah L ****	1						
67	G 3									Robot 1 H ****	1	Robot 1 L ****	1						
68	G# 3			Shower	2	Laugh	1	Hi Pitch Slap H ****	1	Insensible Fuh H ****	1	Insensible Fuh L ****	1					†† Bangzi	1
69	A 3			Thunder	1	Scream	1	Hi Pitch Slap L ****	1	Robot 2 H ****	1	Robot 2 L ****	1					†† Muyu High	1
70	A# 3			Wind	1	Punch	1			Rude Loop Cymbal H ****	1	Rude Loop Cymbal L ****	1					†† Muyu Mid-High	1
71	B 3	O		Stream	2	Heart Beat	1			Noise Burst H ****	1	Noise Burst L ****	1					†† Muyu Mid	1
72	C 4	O		Bubble	2	Foot Steps	1			Fizzer H ****	1	Fizzer L ****	1					†† Muyu Mid-Low	1
73	C# 4			Feed **	2	Applause 2 **	1			Lo-Fi Shaker H ****	1	Lo-Fi Shaker L ****	1					†† Muyu Low	1
74	D 4	O		Cave ****	2					Temple Gong H ****	1	Temple Gong L ****	1						
75	D# 4																		
76	E 4																		
77	F 4																		
78	F# 4																		
79	G 4																		
80	G# 4		2																
81	A 4		2																
82	A# 4																		
83	B 4																		
84	C 5			Dog	1	Machine Gun	1												
85	C# 5			Horse	1	Laser Gun	2												
86	D 5			Bird Tweet 2	1	Explosion	2												
87	D# 5			Kitty **	1	Firework	2												
88	E 5			Growl **	1	Fireball ****	2												
89	F 5			Haunted **	2														
90	F# 5			Ghost	2														
91	G 5			Maou **	2														

: Same as Standard Kit

: No sound

** : MU80 Extension
*** : MU90 Extension
****: MU100 Extension
†† : MU128 Extension

E: Number of elements

TG300B Drum Map

Program#			1		9		17		25		26		33		41		49		57		128	
Note#	Note	Alternate assign	Standard Kit	E	Room Kit	E	Power Kit	E	Electro Kit	E	Analog Kit	E	Jazz Kit	E	Brush Kit	E	Orchestra Kit	E	SFX Set	E	C/M Kit	E
25	C# 0		Snare Roll TG	1																		
26	D 0		Finger Snap TG	1																		
27	D# 0		Hi Q TG	1													Hi-Hat Closed Orchestra	1				
28	E 0		Whip Slap TG	1													Hi-Hat Pedal Orchestra	1				
29	F 0	7	Scratch H TG	1													Hi-Hat Open Orchestra	1				
30	F# 0	7	Scratch L TG	1													Ride Cymbal 1 Orchestra	1				
31	G 0		Sticks TG	1																		
32	G# 0		Click Noise TG	1																		
33	A 0		Metronome Click TG	1																		
34	A# 0		Metronome Bell TG	1																		
35	B 0		Kick Tight	1									Kick Tight Jazz TG	1	Kick Tight Jazz TG	1	Kick Orchestra	1			Kick Tight CM	1
36	C 1		Kick	1	Kick Room	1	Kick Power	1	Kick Electro TG	1	Kick Analog	1	Kick Jazz	1	Kick Small	1	Gran Cassa Orchestra	1			Kick CM	1
37	C# 1		Side Stick	1							Side Stick Analog	1									Side Stick CM	1
38	D 1		Snare	1			Snare Power	1	Snare Electro TG	1	Snare Analog	1			Brush Tap TG	1	Band Snare TG	1			Snare CM	1
39	D# 1		Hand Clap	1											Brush Slap TG	1	Castanet TG 2	1	Hi Q TG	1	Hand Clap CM	1
40	E 1		Snare Tight	1					Snare Power 2	1					Brush Swirl TG	1	Band Snare TG	1	Whip Slap TG	1	Snare Electro CM	1
41	F 1		Floor Tom L	1	Tom Room 1	1	Tom Room 1	1	Tom Electro 1	1	Tom Analog 1	1	Tom Jazz 1	1	Tom Jazz 1	1	Timpani F	1	Scratch H TG	1	Floor Tom L CM	1
42	F# 1	1	Hi-Hat Closed	1							Hi-Hat Closed Analog	1					Timpani F#	1	Scratch L TG	1	Hi-Hat Closed CM	1
43	G 1		Floor Tom H	1	Tom Room 2	1	Tom Room 2	1	Tom Electro 2	1	Tom Analog 2	1	Tom Jazz 2	1	Tom Jazz 2	1	Timpani G	1	Sticks TG	1	Floor Tom H CM	1
44	G# 1	1	Hi-Hat Pedal	1							Hi-Hat Closed Analog 2	1					Timpani G#	1	Click Noise TG	1	Hi-Hat Open Short CM	1
45	A 1		Low Tom	1	Tom Room 3	1	Tom Room 3	1	Tom Electro 3	1	Tom Analog 3	1	Tom Jazz 3	1	Tom Jazz 3	1	Timpani A	1	Metronome Click TG	1	Low Tom CM	1
46	A# 1	1	Hi-Hat Open	1							Hi-Hat Open Analog	1					Timpani A#	1	Metronome Bell TG	1	Hi-Hat Open CM	1
47	B 1		Mid Tom L	1	Tom Room 4	1	Tom Room 4	1	Tom Electro 4	1	Tom Analog 4	1	Tom Jazz 4	1	Tom Jazz 4	1	Timpani B	1	Guitar Fret Noise	2	Mid Tom L CM	1
48	C 2		Mid Tom H	1	Tom Room 5	1	Tom Room 5	1	Tom Electro 5	1	Tom Analog 5	1	Tom Jazz 5	1	Tom Jazz 5	1	Timpani C	1	Cutting Noise H	1	Mid Tom H CM	1
49	C# 2		Crash Cymbal 1	1							Crash Analog	1					Timpani C#	1	Cutting Noise L	1	Crash Cymbal CM	1
50	D 2		High Tom	1	Tom Room 6	1	Tom Room 6	1	Tom Electro 6	1	Tom Analog 6	1	Tom Jazz 6	1	Tom Jazz 6	1	Timpani D	1	String Slap	1	High Tom CM	1
51	D# 2		Ride Cymbal 1	1													Timpani D#	1	Flute Key Click	1	Ride Cymbal CM	1
52	E 2		Chinese Cymbal	1					Reverse Cymbal TG	1							Timpani E	1	Laugh	1		
53	F 2		Ride Cymbal Cup	1													Timpani F'	1	Scream	1		
54	F# 2		Tambourine	1															Punch	1	Tambourine CM	1
55	G 2		Splash Cymbal	1															Heartbeat	1		
56	G# 2		Cowbell	1							Cowbell Analog	1							Footsteps	1	Cowbell CM	1
57	A 2		Crash Cymbal 2	1													Hand Cymbal H TG	1	Footsteps	1		
58	A# 2		Vibraslap	1															Applause	1		
59	B 2		Ride Cymbal 2	1													Hand Cymbal L TG	1	Door Squeak	1		
60	C 3		Bongo H	1															Door Slam	1	Bongo H CM	1
61	C# 3		Bongo L	1															Scratch Cut	1	Bongo L CM	1
62	D 3		Conga H Mute	1							Conga Analog H	1							Wind Chime	1	Conga H Mute CM	1
63	D# 3		Conga H Open	1							Conga Analog M	1							Ignition	1	Conga H Open CM	1
64	E 3		Conga L	1							Conga Analog L	1							Squeal	1	Conga L CM	1
65	F 3		Timbale H	1															Exhaust	1	Timbale H CM	1
66	F# 3		Timbale L	1															Crash	1	Timbale L CM	1
67	G 3		Agogo H	1															Siren	1	Agogo H CM	1
68	G# 3		Agogo L	1															Train	1	Agogo L CM	1
69	A 3		Cabasa	1															Jet Plane	2	Cabasa CM	1
70	A# 3		Maracas	1							Maracas 2	1							Helicopter	1	Maracas CM	1
71	B 3	2	Samba Whistle H TG	1															Starship	2	Samba Whistle H TG CM	1
72	C 4	2	Samba Whistle L TG	1															Gunshot	1	Samba Whistle L TG CM	1
73	C# 4	3	Guiro Short TG	1															Machine Gun	1	Vibraslap CM	1
74	D 4	3	Guiro Long TG	1															Laser Gun	2		
75	D# 4		Claves	1							Claves 2	1							Explosion	2	Claves CM	1
76	E 4		Wood Block H	1															Dog	1	Laugh	1
77	F 4		Wood Block L	1															Horse	1	Scream	1
78	F# 4	4	Cuica Mute TG	1															Bird Tweet	2	Punch	1
79	G 4	4	Cuica Open TG	1															Shower	2	Heartbeat	1
80	G# 4	5	Triangle Mute TG	1															Thunder	1	Footsteps	1
81	A 4	5	Triangle Open TG	1															Wind	1	Footsteps	1
82	A# 4		Shaker	1															Seashore	2	Applause	1
83	B 4		Jingle Bells	1															Stream	2	Door Squeak	1
84	C 5		Bell Tree	1															Bubble	2	Door Slam	1
85	C# 5		Castanet TG	1																	Scratch Cut	1
86	D 5	6	Surdo Mute TG	1																	Wind Chime	1
87	D# 5	6	Surdo Open TG	1																	Ignition	1
88	E 5																Applause	1			Squeal	1
89	F 5																				Exhaust	1
90	F# 5																				Crash	1
91	G 5																				Siren	2
92	G# 5																				Train	1
93	A 5																				Jet Plane	2
94	A# 5																				Helicopter	1
95	B 5																				Starship	2
96	C 6																				Gunshot	1
97	C# 6																				Machine Gun	1
98	D 6																				Laser Gun	2
99	D# 6																				Explosion	2
100	E 6																				Dog	1
101	F 6																				Horse	1
102	F# 6																				Bird Tweet	2
103	G 6																				Shower	2
104	G# 6																				Thunder	1
105	A 6																				Wind	1
106	A# 6																				Seashore	2
107	B 6																				Stream	2
108	C 7																				Bubble	2

(light grey) : Same as Standard Kit (dark grey) : No sound

Performance List

(Preset Performance List MSB=001, LSB=000)

Pgm#	Category	Performance Name	Comment
1	FX	Heavens Door	Warm effect sound. MW controls the filter.
2	PF	Stereo Grand	Grand piano with a stereo-sampled feel.
3	BR	Saw Classic	Analog sawtooth wave brass. Delay effect.
4	FX	Analog Age	Warm and transparent analog synth pad. Aftertouch controls the filter.
5	FX	VoxBell	Mixture of synth voice and bell.
6	KS	Two Flutish	Left hand plays pad, right hand plays pan-flute.
7	BA	Super Bass	Electric bass with superb low range and thickness.
8	OR	70s Organ AT	Organ of the 70's. Aftertouch controls rotary speed.
9	SL	Touch Line	Sawtooth wave with fuzz. Move the filter and use for techno sequences.
10	SC	Rave Mecca	Dance sound for chording. MW controls the filter.
11	EN	Superstrings	Warm analog synth strings. MW controls the filter.
12	PF	Old EP	Vintage electric piano of yesteryear.
13	LD	Sync SynQ	Synth grand typical of analog synthesizers.
14	PD	Fancy Pad	Atmospheric pad. Aftertouch control the filter.
15	SC	Dikk Tekk	Good for hard sequenced phrases. MW controls the filter.
16	ST	Laser Harp	Synth with deep phasing.
17	GT	Feedback EG	Distortion guitar with realistic feedback.
18	OR	Full Organ	Bright electric organ. MW controls filter.
19	LD	Dyno Lead	Classic analog lead. Portamento is effective.
20	PF	CP70 On Stage	The famous Yamaha electric grand.
21	BR	Super Brass	Powerful straight-ahead brass section. MW controls the filter.
22	FX	Ethnograph	Impressionistic new-age sound collage.
23	SL	Tecspiration	Analog techno sound with fuzz.
24	CO	Vox Pop	Tight synth chorus. Good for rapid passages.
25	PD	Dark Pad	Dark synth pad. MW controls the filter.
26	FX	Sparkle Pad	Sparkling pad. MW causes a surprising change.
27	BR	Jump-off	Legendary synth brass.
28	OR	Overdrive OR	Organ with overdrive.
29	GT	Ricky Guitar	Clean electric guitar for lead parts.
30	SC	Euro Hook	Thick analog sound for percussive sequences.
31	RD	Groovin' Baritone	Baritone sax.
32	FX	Alien Peace	Gorgeous digital synth using two completely different elements.
33	KS	Hit House	Novel split with four brass shots.
34	GT	6-string Guitar	Acoustic guitar with steel strings.
35	EN	Phase Strings	Analog synth strings with phaser applied. MW control the filter.
36	LD	Hyper Shaku8	Synth-type shakuhachi with unique blown feel.
37	OR	Early Bird	Organ with symphonic effect applied. Good for dance music.
38	CO	Orchestral Suite	Orchestral combination of strings, horn and bell.
39	SC	Fat Hook	Ultimate synth for Euro-sound.
40	KS	R&B Gig	Split with piano/strings and organ.
41	OR	Deep Harp	Clear harmonic. Great for solos.
42	FX	Almost Heaven	Pad with memorable bell sound.
43	SL	Digi Bizzar	Radical digital synth sound. For electronic music.
44	OR	Euro Accordion	Accordion with a European flavor.
45	EN	2 Octaves Strings	Bright analog strings. Two-octave layer.
46	PF	New House Piano	Piano for a new music scene.
47	OR	Crisp Organ	Percussive electric organ.
48	GT	Warm Amp	Electric guitar that simulates even the warm character of a guitar amp.
49	BA	Flangi Baze	Simulation of a monophonic analog bass. MW control the filter.
50	KS	1st Violin	Split between a string ensemble and a solo violin.
51	EN	Deep Choir	Mixed chorus with long reverb.
52	PF	Old Clavi	Old clavi with dynamic wah.
53	SC	Dance Chord	Thick analog synth for chord backing of dance music.
54	FX	White Train	Hypnotic pad. Aftertouch controls the filter.
55	BR	Power Synth Brass	Powerful synth brass.
56	BA	Deep Port	Thick synth bass with sustain. Portamento is applied.
57	SC	Floor Tack	Synth suitable for dance music chording. MW controls the filter.
58	GT	Rich Nylon Guitar	Rich acoustic guitar with nylon strings.
59	OR	Solemn Organ	Solemn pipe organ.
60	CO	Piano & Strings	Layered acoustic piano and stereo strings.
61	RD	Rich Bass Clarinet	Richly expressive bass clarinet for soloists.
62	BR	Slap Switch	Slap bass with velocity split.
63	EN	Hi Strings	Hybrid strings that mix acoustic and synth.
64	PD	Soft Sweep	Spacious pad. MW controls the tone.
65	OR	Draw Organ MW	Drawbar organ. MW changes the rotary speed.
66	SL	Porta Line MW	A simple synth lead. MW controls the filter.
67	FX	Crypt	An effect sound that takes advantage of portamento. Raise MW to make the sound change even more.
68	PF	Easy Seven	Classic FM electric piano. Layered with synth strings.
69	KS	Guitar & Sax	Split sound with soft-feeling guitar and breathy tenor sax.
70	PF	Gut EP	Layered DX electric piano and acoustic guitar. MW adds a pad.
71	BA	SQ2003 Wheel	Fuzz synth with powerful filter modulation. MW controls the filter.
72	PD	Fanta Pad	Spacy synth pad with a "sizzling" feel.
73	SC	Dance Comp	Rhythm synth sound suitable for chord sequences.
74	ET	AfricanGrand	Pitched African percussion.
75	BR	Trombonist	Expressive brass sound suitable for solos.
76	FX	Orion	Mysterious sound effect. MW controls the filter.
77	BR	Remix Brass	Velocity split between strings/brass section and brass fall.
78	PF	Specter EP	Electric piano. Move MW to play various types of sound.
79	SC	Tech Chord 1	Dance sound with layered minor third and fifth. MW controls the filter.
80	KS	Bass + Piano/Brass	Split between a velocity-split piano and brass, and bass.
81	BA	SQ-Bass	Synth bass suitable for techno/dance sequences.
82	EN	Rich Strings	Strings. Velocity will affect the attack and depth.
83	BR	Hybrid Brass	Punchy brass that combines acoustic and synth.
84	PF	Phaze Clavi	Analog clavi. MW controls the phaser effect.
85	SC	Toy SQ	Analog sound with cross delay for typed-in sequences.
86	SE	MUtopia	Futuristic-sounding pad. Aftertouch controls the filter.
87	PD	Float Pad	Warm-feeling pad. MW controls the filter.
88	OR	Tiny Pipe	Small pipe organ.
89	SC	Sweet Wine	Synth sound suitable for electronic music.
90	PD	Pad Swell	Bright-sounding synth pad with filter change.
91	FX	Aquarius 90	Underwater sound effect that mixes voice and struck glass.
92	ET	Perc Shamisen	Percussive shamisen.
93	PF	Clav-babe	Synth clavi with distinctive auto-wah.
94	FX	Sweepy Plant	Ambient-type sound with distinctive sweep and modulation.
95	CP	Door Bell	Music box with bell-like sound.
96	SC	FAT*SQ	Thick synth lead with just a touch of portamento.
97	FX	Lo-Fi Loop	"Lo-fi" percussion loop sound.
98	KS	Volksmusik	Split between accordion and brass ensemble.
99	KS	Jfunk Jammin	Split between a solid electric piano and bass.
100	KS	Alpen Echo	Split between a tuba and trumpet. MW controls the delay effect.

PF : piano CP : chromatic percussion OR : organ, accordion, harmonica GT : guitar BA : bass ST : strings EN : ensemble BR : brass
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Performance List

(Internal Performance List 2 MSB=002, LSB=000)

Pgm#	Category	Performance Name	Comment
1	PF	Concert Grand	Rich full-concert grand piano that simulates even the resonances.
2	PF	Midi & Grand	Grand piano + electric piano.
3	PF	60s Piano	Vintage stage electric piano with a slight distortion effect.
4	PF	CP Pad	Layer with a pad that takes advantage of the character of the Yamaha CP80.
5	PF	Rhody Phaze	Electric piano with phase effect.
6	PF	Rich DX EP	Electric piano sound of the classic DX7.
7	PD	Grand Pad	Warm and dark synth pad. Two-octave layer.
8	PD	Pictures II	Spacy synth pad with a unique feel of pitch rise.
9	PD	Movie Pad II	Vintage synth-type pad.
10	PD	Hmu Choirer	Synth pad featuring human voice.
11	PD	Polypad	Good old analog synth pad.
12	PD	Blonk Y	Combination of analog sound and voice pad. Aftertouch controls the filter.
13	PD	Dark Pad	Dark-feeling pad suitable for pop.
14	SC	Analog SQ 1	Analog synth with decay, suitable for sequenced phrases.
15	SC	Analog SQ 2	Short decay analog synth, suitable for sequenced phrases.
16	SC	Xen	Unique hit sound in which each key plays a chord.
17	SC	Short SQ	Analog synth with extremely short decay, suitable for sequenced phrases.
18	SC	Fat Poly	Thick synth sound suitable for dance.
19	OR	Backyard Organ	Jazzy organ suitable for backing.
20	OR	Rock Organ	The ultimate rock organ, with distortion and rotary speaker effect.
21	OR	Stereo Field Organ	Organ with stereo feel.
22	OR	Drawbars 1 AT	Drawbar organ of the 70's. Aftertouch changes the rotary speed.
23	OR	Drawbars 2 MW	Sentimental organ. MW changes the rotary speed.
24	OR	Full Church	Church pipe organ.
25	OR	Old Rock Organ	Electric organ of the 60's.
26	OR	Progressive Organ	Organ typical of progressive rock. MW applies a rotary speaker effect.
27	GT	12-string Fantasy	12 string guitar sound. Continue pressing, and a pad will be added.
28	GT	Wah Guitar	Funky electric guitar with auto-wah.
29	GT	FM Jazz EG	Jazz guitar typical of FM tone generators.
30	GT	Rich 12-string Guitar	Acoustic 12 string guitar.
31	GT	Pedal Steel Wheeler	Pedal steel guitar. Try using the pitch bend wheel.
32	GT	Chorus Guitar	Electric guitar with chorus.
33	BA	Hip Bais	Synth bass with wah. MW controls the filter.
34	BA	Rezzy Bass	Synth bass with strong resonance, suitable for sequenced techno phrases.
35	BA	Fuzzline	Synth bass with distortion. MW controls the filter.
36	BA	Bassline 1	Synth bass suitable for dance or techno.
37	BA	Bassline 2	Synth bass with short decay.
38	EN	Pink Bass MW	Synth bass with distortion and portamento.
39	EN	Vienna Strings	String ensemble with an acoustic feel.
40	EN	Orchestra Plus	Orchestral sound with added timpani at strong velocities.
41	EN	Litepad	Light-feeling synth pad.
42	EN	Mello Strings	The strings sound of a legendary instrument.
43	EN	Ooh Choir	Chorus, with effects used to create a feel of spaciousness.
44	EN	Compu Vox	Use on sequenced phrases. MW controls the auto-pan speed.
45	BR	Cutting Brass	Sharp brass section.
46	BR	Tijuana Brass	Soft brass section of the 60's.
47	BR	CS80 Mind	Brass of Yamaha's famous analog synthesizer, the CS80.
48	BR	Fat Ensemble	Warm analog synth-like pad.
49	SC	Beat Hit	Hit sound, effective when used in an intro.
50	BR	Analog Brass	Analog brass with strong sense of attack.
51	LD	Mono Wire Lead	Mild synth lead.
52	LD	Vintage Lead	Old-style analog solo synth.
53	LD	Sticky Lead	Synth lead in which velocity creates unique tonal change in the attack.
54	LD	Saww Lead	Percussive synth lead with detune.
55	LD	Fat Glide	Thick-sounding synth lead.
56	LD	Early Lead	Mild synth lead with attack. MW controls the filter.
57	FX	Dreamer	Soft-attack synth sound with a feel of sweep. MW controls the filter.
58	FX	Slow Sweep	Synth sound in which the filter changes slowly.
59	FX	Flower	Layered harp and chorus.
60	FX	High Light	Synth sound that layers various sounds.
61	PF	DX Lover	Rich electric piano that blends tasty DX-type sounds.
62	PF	Clav Western	Old-style clavi-type sound.
63	PF	TX802 EP	FM-type electric piano. A versatile sound usable in a variety of styles.
64	PF	Chorus DX EP	DX electric piano with chorus.
65	PF	EP Velo SW	Old-style electric piano with tonal change controlled by velocity.
66	CP	Cool Vibes	Percussive vibraphone with reverb.
67	SC	Poly Syn	The classic analog poly synthesizer.
68	SC	Tech Chord 2	Dance sound with layered minor third and fifth. MW controls the filter.
69	SC	Hi Pass SQ 1	Synth sound using a high pass filter.
70	SC	Eight Oscis	Thick-sounding synth brass .
71	SC	HPF Flight	Light-feeling synth lead suitable for sequenced phrases.
72	SC	Acid Hook	Percussive synth sound. Also usable as synth bass.
73	SC	Fat Comp	Versatile comping sound that can be played either as brass or lead.
74	OR	70s Rock Organ	Rock organ of the 70's.
75	OR	Click Organ MW	Electronic organ with key-click sound. MW changes the rotary speed.
76	OR	Nice Organ	Bright-feeling organ of the 80's.
77	OR	Sacral Organ	Full digital organ. MW changes the rotary speed.
78	OR	Baroque Feel	Solemn pipe organ with layered strings.
79	OR	Plain Pipe	Simple-feeling pipe organ.
80	OR	French Accordion	Accordion with a French touch.
81	OR	Lambada Accordion	Accordion suitable for tango or lambada.
82	BA	Lately Bass	Synth bass typical of FM tone generators (4 operator).
83	BA	FM Slap	Slap bass typical of FM tone generators.
84	BA	Frankfurt Bass	Synth bass with deep resonance, suitable for sequenced phrases.
85	KS	Pizza Time	Split ensemble strings and pizzicato.
86	RD	Soprano Sax	Soprano sax that simulates even the breathing.
87	ET	Banjo Man	Banjo sound suitable for Dixie style.
88	ET	Kanoonics	Percussive-feeling canoon (an instrument with tone similar to a Japanese Koto).
89	SE	Devil's House	Sound effect evoking a devil's lair. Play strongly in the C3 region to hear demon voices and screams.
90	SE	Alien	A mysterious space creature appears. For strong velocities you will hear groaning.
91	SE	Sea View	Pretend that you are on a deep-sea voyage.
92	KS	Phat & Funky	Split with strings and wah guitar.
93	CO	Horn & Strings	Versatile strings with horn added.
94	CO	Clavorgue	A blend of clavi and organ.
95	CO	1950's Jazz	Split with vintage wood bass and piano.
96	ET	Asian Beat	Asiatic percussion with mysterious sense of pitch. Play strongly to sound a drum.
97	FX	Sweepy Line	Percussive synth with a feeling of resonance.
98	FX	Blue & Blue	Transparent pad.
99	FX	Going UP	Ambient-type sound with unique feeling of ascent.
100	SE	MU Creation	Avant-garde sound effect expressed by a diverse variety of sounds.

With the factory settings, the internal performances will be occupied by the above sounds.

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